

Receiving Report

Date: 14/3/27

Batch No: M128636

Supplier: Bre

Dart P/O: 23496

Packing Slip: Yes ☒ No ☐
 Invoice: Yes ☐ No ☒
 Receipt: Cash ☐ Cr ☒
 New Supplier Yes ☐ No ☒

Release Note Attached: Yes ☒ No ☐ N/A ☐
 Waybill Attached: Yes ☐ No ☒ N/A ☐
 Shipment Complete: Yes ☐ No ☒ N/A ☒
 QC18 Inspection ☐ N/A ☒
 Work Order ☐

Discrepancies

Part Number	Description	Quantity Ordered	Quantity Rec'd	Quantity Short	Quantity Inspected	Quantity Rejected	Comment / NCR Number
	<u>ivir Po B.P. 13.0</u>						

Initials of Receiver QC12 

Production/Admin: _____
 Date _____
 Received/Costing _____
 Initial _____

Location _____



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO23495**

Purchase Order Date 3/24/2014

PO Print Date 3/24/2014

Page Number 1 of 7

Order From :

VU-BEA001

Ship To : DART AEROSPACE LTD

B/E AEROSPACE INC
88289 EXPEDITE WAY
CHICAGO, IL 33172
USA

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 305-925-2600

Ship To Contact

Ship To Phone

Ship Via: FedEx PI collect

Ship Acct:

Buyer

Michael Gregoire

Customer POID

Customer Tax #

10127-2607

Terms

Net 30

Currency

USD

FOB

FCA - (Free Carrier)

M/D 8636

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	AN310-4	Nut	4/2/2014 Yes 4/2/2014	FN	150.00 Each	\$0.65	\$97.50
Line Total:							\$97.50
2	AN3C37A	BOLT	4/2/2014 Yes 4/2/2014		200.00 Each	\$3.60	\$720.00
Line Total:							\$720.00
3	AN4-42A ✓ <i>359</i>	Bolt	4/2/2014 Yes 4/2/2014		100.00 ✓ Each	\$1.15	\$115.00

SP14-3-27

Note:

3/24/2014



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO23495**

Purchase Order Date 3/24/2014

PO Print Date 3/24/2014

Page Number 2 of 7

Order From :

VU-BEA001

B/E AEROSPACE INC
88289 EXPEDITE WAY
CHICAGO, IL 33172
USA

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

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Ship Via: FedEx PI collect

Ship Acct:

Buyer

Michael Gregoire

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10127-2607

Terms

Net 30

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USD

FOB

FCA - (Free Carrier)

Line Total: \$115.00

4	AN4C21A ✓	BOLT	4/2/2014	50.00 ✓	\$1.05	✓ \$52.50
			Yes	Each		
			4/2/2014			

358

2014-3-27

Line Total: \$52.50

5	AN6-16A	BOLT	4/2/2014	15.00	\$0.99	\$14.85
			Yes	Each		
			4/2/2014			

Line Total: \$14.85

6	AN6C12A	Bolt	4/2/2014	50.00	\$4.00	\$200.00
			Yes	Each		
			4/2/2014			

Line Total: \$200.00

Note:

3/24/2014



Dart Aerospace Ltd.
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PURCHASE ORDER

Purchase Order ID **PO23495**

Purchase Order Date 3/24/2014

PO Print Date 3/24/2014

Page Number 3 of 7

Order From :

VU-BEA001

Ship To : DART AEROSPACE LTD

B/E AEROSPACE INC
88289 EXPEDITE WAY
CHICAGO, IL 33172
USA

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

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FCA - (Free Carrier)

7	AN833-6D	Elbow, Bulkhead-M-Flare	4/2/2014	15.00	\$9.25	\$138.75
			Yes	Each		
			4/2/2014			

Line Total: \$138.75

8	BSP43 ✓	RIVET	4/2/2014	100.00 ✓	\$0.15	\$15.00
	282		Yes	Each		
			4/2/2014			

Line Total: \$15.00

9	CCR264SS3-3 ✓	Cherry Rivet	4/2/2014 FN	100.00 ✓	\$0.15	\$15.00
	327		Yes	Each		
			4/2/2014			

Line Total: \$15.00

10	MS20601-AD4W8	RIVET	4/2/2014	300.00	\$0.25	\$75.00
			Yes	Each		
			4/2/2014			

Note:

3/24/2014



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Tel: 613 632 9577
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PURCHASE ORDER

Purchase Order ID PO23495

Purchase Order Date 3/24/2014

PO Print Date 3/24/2014

Page Number 4 of 7

Order From :

VU-BEA001

Ship To : DART AEROSPACE LTD

B/E AEROSPACE INC
88289 EXPEDITE WAY
CHICAGO, IL 33172
USA

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 305-925-2600

Ship To Contact

Ship To Phone

Ship Via: FedEx PI collect

Ship Acct:

Buyer

Michael Gregoire

Customer POID

Customer Tax # 10127-2607

Terms

Net 30

Currency

USD

FOB

FCA - (Free Carrier)

					Line Total:	\$75.00
11	MS20822-3D ✓ 313.	ELBOW	4/2/2014 FN Yes 4/2/2014	5.00 ✓ Each	\$6.10	\$30.50
					Line Total:	\$30.50
12	MS21044-N08	Nut	4/2/2014 Yes 4/2/2014	250.00 Each	\$0.75	\$187.50
					Line Total:	\$187.50
13	MS21069L3	ANCHOR NUT	4/2/2014 Yes 4/2/2014	100.00 Each	\$0.35	\$35.00
					Line Total:	\$35.00

Note:

3/24/2014



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1270 Aberdeen Street
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Tel: 613 632 9577
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PURCHASE ORDER

Purchase Order ID PO23495

Purchase Order Date 3/24/2014

PO Print Date 3/24/2014

Page Number 5 of 7

Order From :

VU-BEA001

Ship To : DART AEROSPACE LTD

B/E AEROSPACE INC
88289 EXPEDITE WAY
CHICAGO, IL 33172
USA

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone

305-925-2600

Ship To Contact

Ship To Phone

Ship Via:

FedEx PI collect

Ship Acct:

Buyer

Michael Gregoire

Customer POID

Customer Tax #

10127-2607

Terms

Net 30

Currency

USD

FOB

FCA - (Free Carrier)

14	MS21069L4 ✓	Nutplate	4/2/2014 Yes 4/2/2014	50.00 ✓ Each	\$1.00	\$50.00
317						
SP14-3-27						
Line Total:						\$50.00
15	MS21920-20	Clamp	4/2/2014 FN Yes 4/2/2014	225.00 Each	\$7.50	\$1,687.50
Line Total:						\$1,687.50
16	MS21920-22 ✓	Clamp	4/2/2014 FN Yes 4/2/2014	200.00 ✓ Each	\$15.00	\$3,000.00
SP14-3-27						
Line Total:						\$3,000.00
17	MS24694-S148	SCREW	4/2/2014 Yes 4/2/2014	25.00 Each	\$15.00	\$375.00

Note:

3/24/2014



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Purchase Order ID **PO23495**

Purchase Order Date 3/24/2014

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Page Number 6 of 7

Order From :

VU-BEA001

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88289 EXPEDITE WAY
CHICAGO, IL 33172
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Michael Gregoire

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Customer Tax #

10127-2607

Terms

Net 30

Currency

USD

FOB

FCA - (Free Carrier)

						Line Total:	
18	MS27039-1-08 ✓	Screw	4/2/2014 FN Yes 4/2/2014	2,100.00 ✓ Each		\$0.06	\$375.00 ✓
						Line Total:	\$126.00
19	MS27039C1-08	SCREW	4/2/2014 Yes 4/2/2014	2,000.00 Each		\$0.30	\$600.00
						Line Total:	\$600.00

Note:

3/24/2014



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO23495

Purchase Order Date 3/24/2014

PO Print Date 3/24/2014

Page Number 7 of 7

Order From :

VU-BEA001

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

B/E AEROSPACE INC
88289 EXPEDITE WAY
CHICAGO, IL 33172
USA

Contact Name

Vendor Phone 305-925-2600

Ship To Contact

Ship To Phone

Ship Via: FedEx PI collect

Ship Acct:

Buyer

Michael Gregoire

Customer POID

Customer Tax #

10127-2607

Terms

Net 30

Currency

USD

FOB

FCA - (Free Carrier)

20 71401-45

4/2/2014

0.00

\$0.00

\$0.00

No

Each

Procurement Quality Clauses

A005 RIGHT OF ENTRY

A012 CHEMICAL AND PHYSICAL TEST REPORTS

A016 PERSONNEL QUALIFICATION

A026 CERTIFICATION OF MATERIAL CONFORMANCE

A032 PUBLIC LAW 101-592 FASTENER QUALITY ACT

A033 STATEMENT OF CONFORMITY/TEST RECORDS

FOR NAS, AN and MS FASTENERS

A040 NOTIFICATION OF QUALITY ESCAPE

A041 QUALITY MANAGEMENT SYSTEM

A042 DART NOTIFICATION BY SUPPLIER

A043 RETENTION OF QUALITY DOCUMENTS

SP14-3-27

Line Total:

\$0.00

PO Total:

\$7,535.10

Note: Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Change Nbr:

1

Change Date:

3/24/2014



B/E Aerospace, Inc.

Page: 1 of 1

CONSUMABLES MANAGEMENT

P.O. Box 025263, Miami, FL 33102-5263 • Tel: 305.925.2600 • Fax: 305.507.7191
Plant Location: 10000 NW 15th Terrace, Miami, FL 33172 • SITA: MIAMMCR
www.beconsumables.com

Shipped From: 9835 NW 14TH ST, MIAMI, FL 33172


Material Certification

The items set forth on the purchase order referred to below have been visually inspected and the dimensions thereof have been measured by us, and based on the aforesaid, as well as the representation made to us by the manufacturers of the items subject of such purchase order, we hereby certify that such items are in conformity with all current governmental and manufacturer's requirements, specifications, drawings, and conform to the purchase order requirements. Said items are in new condition and have not been obtained from any U.S. Government or Military source and are traceable to B/E Aerospace, Inc.

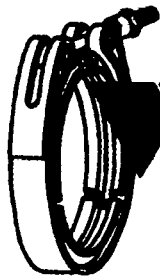
FIRM: DART AEROSPACE LTD

PURCHASE ORDER#: PO23495

LINE#	QUANTITY	U/M	PART-NUMBER	CUST REF#	LOT-NUMBER	MANUFACTURER	CCODE	MFR DATE	EXP DATE
16	200	EA	MS21920-22		164087	VOSS INDUSTRIES INC	14242		


Jason Lewis
Vice President of Quality

03/25/14



AS9100 AND ISO 9001 ACCREDITED

**VOSS INDUSTRIES
INC.**

Divisions: Voss Aerospace • Voss Technologies
2168 WEST 25TH STREET • CLEVELAND, OHIO 44113-4172
PHONE: 216-771-7655 • FAX 216-771-2887

PACKING SLIP AND
CERTIFICATION OF COMPLIANCE

DATE: Nov 18, 2013
PACKING SLIP NO: 424875 X
JOB NUMBER: 164087

Sold to:
B/E AEROSPACE CONSUMABLES MGMT
ATTN ACCOUNTS PAYABLE
PO BOX 025263
MIAMI FL 33102-5263

Ship to:
B/E AEROSPACE CONSUMABLES MGMT
ATTN RECEIVING
9835 NW 14TH STREET
MIAMI FL 33172

Cust No.	Customer P.O. No.	Ship Date	Ship Via	F.O.B.
51310/00	OKWK09	11/18/13	RFS	VOSS PLT
Our Order NO.	Order Date	Sales Rep	Terms	
164087	9/28/12	R7	NET 30 DAYS	

Qty.	Qty.	Part/		
Ordered	Shipped	Description		UM
750	500	MS21920-22	REV-D	EA
		BAND CLAMP		
		Voss Internal #: 0446115		
		MS21920-22 REV D		
		FEDEX GROUND COLLECT		
		ACCT #0331-0149-0		
		4 CTNS @ 14# EA		
		4 CTNS @ 125 PCS EA		

All parts comply to specialty metal DFAR requirements
All parts manufactured in USA

We hereby certify that parts and/or materials included in the above shipment have been manufactured and/or processed in compliance with all applicable purchase order and drawing specifications. In addition, data of chemical, physical and mechanical properties, where required, are on file for examination.


Michael Schleckman
Quality Manager

E-mail: mschleckman@vossind.com

** BAR CODE LABEL NEEDED **

ITAR/EAR EXPORT CONTROLS MAY APPLY PER FEDERAL REGULATIONS (22 CFR 120-130)

PLEASE DO NOT ASSUME ANY DEBITS UNTIL VOSS CREDIT IS AUTHORIZED.
WE HEREBY CERTIFY THAT THESE GOODS PRODUCED IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS OF SECTIONS 6, 7 AND 12 OF THE FAIR LABOR STANDARDS ACT, AS AMENDED, AND OF REGULATIONS AND ORDERS OF THE UNITED STATES DEPT. OF LABOR ISSUED UNDER SECTION 14 THEREOF.

EEO CLAUSE from EXECUTIVE ORDER 11246

EQUAL EMPLOYMENT OPPORTUNITY: The Equal Employment Opportunity clause in Section 202, Paragraphs 1 through 7 of Executive Order 11246, as amended, relative to equal employment opportunity and the Implementing Rules and Regulations of the Office of Federal Contract Compliance and the affirmative action clauses set forth in 41C.F.R. 60-250.4 and 41C.F.R. 60-741.4 relating to disabled veterans, veterans of the Vietnam era and handicapped individuals are incorporated herein by specific reference.



B/E Aerospace, Inc.

Page: 1 of 1

CONSUMABLES MANAGEMENT

P.O. Box 025263, Miami, FL 33102-5263 • Tel: 305.925.2600 • Fax: 305.507.7191
Plant Location: 10000 N.W. 15th Terrace, Miami, FL 33172 • SITA: MIAMMCR
www.beconsumables.com

Shipped From: 10000 NW 15 TERRACE, MIAMI, FL 33172

Material Certification

The items set forth on the purchase order referred to below have been visually inspected and the dimensions thereof have been measured by us, and based on the aforesaid, as well as the representation made to us by the manufacturers of the items subject of such purchase order, we hereby certify that such items are in conformity with all current governmental and manufacturer's requirements, specifications, drawings, and conform to the purchase order requirements. Said items are in new condition and have not been obtained from any U.S. Government or Military source and are traceable to B/E Aerospace, Inc.

FIRM: DART AEROSPACE LTD

PURCHASE ORDER#: PO23495

LINE#	QUANTITY	U/M	PART-NUMBER	CUST REF#	LOT-NUMBER	MANUFACTURER	CCODE	MFR DATE	EXP DATE
8	100	EA	BSP43		Z2471	AVDEL CORP (NC)	5U1K0		

Jason Lewis
Vice President of Quality

03/25/14

Mandel Cherry **TEXTRON**

614 NC Hwy 200 South
PO Box 486
Stanfield, NC 28163-0486
DUNS 101779726

PACKING LIST #947742

Order No: 70239247 Page: 1
Order Date: 12/15/98
Print Date: 01/12/99

Sold To: 75858

Ship To: 75858-02

M & M AEROSPACE HARDWARE
PO BOX 025263
MIAMI, FL 33102
USA

M & M AEROSPACE HARDWARE
1900 N.W. 89TH PLACE
MIAMI, FL 33172
USA

Salespersons: 140

Purchase Order: OK4489

Credit Terms: 1%10,30
1%10, Net 30

Ship Via: Best Way
FOB Point: ORIGIN/PPD/CHARGE

SHIP CAROLINA OR WATKINS OVER 200 LBS/UPS UNDER 200 LBS. UPS
CERTS MUST ACCOMPANY EVERY SHIPMENT NO EXCEPTIONS
INSTRUCTIONS FOR MANDREL SHIPMENTS: KEEP ONE PART NUMBER IN EACH BOX, DO
NOT MIX MANDRELS TOGETHER. EACH BOX MUST BE MARKED WITH P.O. #, PART NUMBER
AND QUANTITY. *****QUALITY MUST SIGN OFF ON ALL
SHIPMENTS IN THEIR
LOCATION***** 100%
inspection required on every shipment. COMBINE SHIPMENTS TO SHIP TRUCK PPD
ON THURSDAY/UNLESS SPECIAL REQUESTS
FAX/HMD

***** MUST FAX SHIPPING PAPERS TO HELEN 704-888-0430 *****

Ln	Item Number	Site T Location	Box Qty Lot/Serial	Qty Open Qty to Ship	Open UM	Due Shipped
5	BSP-04-03 ASY/NAIL	1800		0	179,200.0	EA 01/12/99
		ninship	z2471			
		✓4-11	10m	170,000.0	(17))
		ninship	z2471			
			partial	9,200.0	(1))

CERTIFICATION

ATTENTION: PURCHASING DEPARTMENT

The material and/or parts we are furnishing in this shipment (as shown above) on the subject Purchase Order conform to the order and applicable specifications. Evidence that the material and/or parts meet the specifications and results of all tests for each lot affected will be in our files and will be available for your inspection at any reasonable time.

Quality Control Manager

Signed

Joe Whisonant

TEXTRON Fastening Systems

A Global Leader in Fastening Solutions

Avdel Cherry **TEXTRON**

Avdel Cherry Textron Inc.
614 NC Hwy. 200 S.
P.O. Box 486
Stanfield, NC 28163-0486
704.888.7100
Fax 704.888.7192

CERTIFICATE OF COMPLIANCE

CUSTOMER NAME AND ADDRESS <i>m+m Aerospace</i>		CUSTOMER PURCHASE ORDER <i>947742</i>		
		BUYER CORPORATE PURCHASING		
		Shipper No: <i>70239247</i>	Date Shipped: <i>1-14-99</i>	
		Sold To: <i>m+m</i>		
Customer Part Number		Customer Order No.: <i>OK4489</i>	Ship To: <i>m+m</i>	
Cherry Part Number	DESCRIPTION	Rivet and Mandrel Cert	LOT NO.	QTY SHIPPED
<i>BSP-4-3</i>	<i>Nail Assy</i>	<i>R 27234</i>	<i>22471</i>	<i>179,200.0</i>
		<i>25905</i>		
		<i>S 29177</i>		
		<i>29076</i>		

CERTIFICATION

The items denoted herein have been inspected and/or tested to the extent necessary to assure compliance with all requirements of the noted purchased order, drawing and revision, and applicable specifications. Inspection records and test reports which substantiate this statement are on file at our facility and will be furnished to the buyer upon request.

NOTES AND EXCEPTIONS:



AUTHORIZED SIGNATURE <i>Judy Borsy</i>	NAME <i>Judy Borsy</i>	TITLE QUALITY REPRESENTATIVE	DATE <i>1-14-99</i>
---	---------------------------	---------------------------------	------------------------



Avdel Cherry Textron Inc.
Registered to ISO9001/ISO9000
File No. A5887

CUSTOMER:

MODEL CHERRY TEXTRON
51140-447, 200 5017
D.O. 301 426
STAMPED

Certified Test Report

LOT NUMBER

DATE SHIPPED

007A3-00

9-22-97

PHYSICAL TESTING DATA

M NO.	DESCRIPTION	MECHANICAL PROPERTIES
202	.1225"DIA. +- .0005" 5056-H32 ALUMINUM COLD HEADING WIRE X 30' COILS 300-400# ON WIRE CARRIERS. CUST PART 0005-122. FED SPEC 90A-4804C ***** TRAIL FOR NEW EQUIPMENT *****	ACT. TENSILE 47.9-48.5 KSI.

CHERRY TEXTRON

C27234

RAW MATERIAL
CERTIFICATION

SEP 23 1997



CHEMICAL COMPOSITION

ALLOY	SI	FE	CU	MN	MG	CR	ZN	TI		OTHERS	
										EACH	TOTAL
1100	99% MIN. ALUMINUM										
2011	- .40	- .7	5.0 - 6.0				- .30		Pb .20 - .6 Bi .20 - .6	.05	.15
2017	.20 - .8	- .7	3.5 - 4.5	.40 - 1.0	.40 - .8	- .10	- .25	- .15	Zr+Ti - .20	.05	.15
2024	- .50	- .50	3.8 - 4.9	.30 - .9	1.2 - 1.8	- .10	- .25	- .15	Zr+Ti - .20	.05	.15
2117	- .8	- .7	2.2 - 3.0	- .20	.20 - .50	- .10	- .25			.05	.15
5005	- .30	- .7	- .20	- .20	.50 - 1.1	- .10	- .25			.05	.15
5052	- .25	- .40	- .40	- .40	2.2 - 2.8	.15 - .35	- .10			.05	.15
5056	- .30	- .40	- .10	.05 - .20	4.5 - 5.6	.05 - .20	- .10			.05	.15
5356	- .25	- .40	- .10	.05 - .20	4.5 - 5.5	.05 - .20	- .10	.06 - .20	Be - .0008	.05	.15
6053	45-65% of Mg.	- .35	- .10		1.1 - 1.4	.15 - .35	- .10			.05	.15
6061	.40 - .8	- .7	.15 - .40	- .15	.8 - 1.2	.04 - .35	- .25	- .15		.05	.15
6262	.40 - .8	- .7	.15 - .40	- .15	.8 - 1.2	.04 - .14	- .25	- .15	Pb .40 - .7 Bi .40 - .7	.05	.15
7050	- .12	- .15	2.0 - 2.6	- .10	1.9 - 2.6	- .04	5.7 - 6.7	.06	Zr .08 - .15	.05	.15
7075	- .40	- .50	1.2 - 2.0	- .30	2.1 - 2.9	.18 - .28	5.1 - 6.1	- .20	Zr+Ti - .25	.05	.15

CERTIFY THAT THE ABOVE DESCRIBED MATERIAL HAS BEEN
ED IN ACCORD WITH CURRENT ASTM AND/OR FEDERAL
STANDARDS AND MEETS THE REQUIREMENTS SHOWN.

BENEKE WIRE COMPANY

AUTHORIZED SIGNATURE

JUL 16 1996

CUSTOMER: CHERRY DIV. OF TEXTRON
1224 E. WARNER AVE
P.O. BOX 2157
SANTA ANA CA 92707-0157

67
119

Certified Test Report

LOT NUMBER

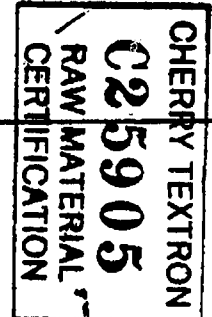
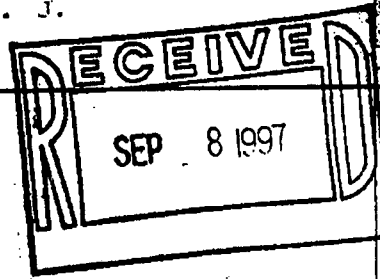
005943-00

DATE SHIPPED

7-10-96

PHYSICAL TESTING DATA

ITEM NO.	DESCRIPTION	MECHANICAL PROPERTIES
005	ALUMINUM COLD HEADING WIRE X 22" BLOCKWOUND 75-100# COILS. CUST PART M005-19. SPEC M-S. REV. J. FED SPEC QQA-43. C.	ACT. TENSILE 48.2-48.5 KSI.
C25905		



CHEMICAL COMPOSITION

ALLOY	SI	FE	CU	MN	MG	CR	ZN	TI	OTHERS	EACH	TOTAL
1100											
2011	.40	.7	5.0 - 6.0				.30		Pb .20 - .6 Bi .20 - .6	.05	.15
2017	.8	.7	3.5 - 4.5	.40 - 1.0	.40 - .8	.10	.25	.15	Zr+Ti .20	.05	.15
2024	.50	.50	3.8 - 4.9	.30 - .9	1.2 - 1.8	.10	.25	.15	Zr+Ti .20	.05	.15
2117	.8	.7	2.2 - 3.0	.20	.20 - .50	.10	.25			.05	.15
5005	.30	.7	.20	.20	.50 - 1.1	.10	.25			.05	.15
5052	.25	.40	.10	.10	2.2 - 2.8	.15 - .35	.10			.05	.15
5056	.30	.40	.10	.05 - .20	4.5 - 5.6	.05 - .20	.10			.05	.15
5356	.25	.40	.10	.05 - .20	4.5 - 5.5	.05 - .20	.10	.06 - .20	Be .0008	.05	.15
6053	45-65% of Mg	.35	.10		1.1 - 1.4	.15 - .35	.10			.05	.15
6061	.40 - .8	.7	.40	.15	.8 - 1.2	.04 - .35	.25	.15		.05	.15
6262	.40 - .8	.7	.40	.15	.8 - 1.2	.04 - .14	.25	.15	Pb .40 - .7 Bi .40 - .7	.05	.15
7050	.12	.15	2.6	.10	1.9 - 2.6	.04	5.7 - 6.7	.05	Zr .08 - .15	.05	.15
7075	.40	.50	2.0	.30	2.1 - 2.9	.18 - .28	5.1 - 6.1	.20	Zr+Ti .25	.05	.15

WE CERTIFY THAT THE ABOVE DESCRIBED MATERIAL HAS BEEN TESTED IN ACCORD WITH CURRENT ASTM AND/OR FEDERAL STANDARDS AND MEETS THE REQUIREMENTS SHOWN.

BENEKE WIRE COMPANY

AUTHORIZED SIGNATURE

Wm. H. Davis
BENEKE WIRE COMPANY

JOY WIRE CORPORATION

East Main Street
Mount Joy, PA 17552-9505

SHIPPING ORDER FORM
LA-008 7/7/97
PAGE 6

ORDER NUMBER

325579

AVDEL CHERRY TEXTRON
P.O. BOX 486

STANFIELD, NC 28163-0486

S
H
I
P
T
O

AVDEL CHERRY TEXTRON
614 NC HWY 200 SOUTH
P.O. BOX 486
STANFIELD, NC 28163-0486

CUSTOMER NUMBER	CSTM. ORD. DATE	CUSTOMER ORDER NUMBER	REV. #	DATE ENTERED
299060	07/23/98	21228		07/23/98

PART NUMBER	PRODUCT CLASS	QUANTITY ORDERED	UNIT/MEAS.
33290	351	1328.00	L.B

076 PHOS C1018 MANDREL
Finish: PHOS
scrappings: 30" STEEL REELS
Tensile: 105/120,000
tolerance: +/- .0005
specification: Textron M125 rev.1.

PHOS-076.600#
AX/REEL: TRY TO
PAY BY MID TENS

CHERRY TEXTRON
C29177
RAW MATERIAL
CERTIFICATION

RC 32618
SEP 10 1998

QUANTITY SHIPPED	DATE
3,070	09/08/98
TENSILE SHIPPED	
113,000 / 120,000	

Gentlemen:

Based on our supplier's ladle analysis and our mechanical testing, we certify that the above material meets the following specifications:

Chemical Analysis

Type: C1018

Heat No.		Lot No.		
A40917				
C	Mn	P	S	Si
.17	.66	.013	.011	.18
Cr	Ni	Mo	Fe	Cu
Co	Ti	Al	Cb	Ta
Mg	Zr	N	Other:	

STATE OF PENNSYLVANIA)
COUNTY OF LANCASTER)

SUBSCRIBED AND SWORN THIS

..... 8TH day of SEPTEMBER 1998
before the undersigned, who does hereby certify that under the laws of the State aforesaid, he is duly authorized to administer oaths.

Dena L. Pfautz (Signed)
Notary Public

Notarial Seal
Dena L. Pfautz, Notary Public
Mt. Joy Boro. Lancaster County
My Commission Expires Dec. 21, 2000
Member, Pennsylvania Association of Notaries

Dallachter (Signed)
Inspector

Mount Joy Wire Corporation
1000 E. Main Street
Mount Joy, PA 17552-9505

100 East Main Street
Mount Joy, PA 17552-9505

SHIPPING ORDER FORM
L4-088 7/7/87
PAGE 5

ORDER NUMBER

324246

AVDEL CHERRY TEXTRON
P O BOX 486
STANFIELD, NC 28163-0486

S
H
I
P

T
O

AUDEL CHERRY TEXTRON
614 NC HWY 200 SOUTH
P O BOX 486
STANFELD, NC 28163-0486

CUSTOMER NUMBER	CSTM. ORD. DATE	CUSTOMER ORDER NUMBER	REV. #	DATE ENTERED
299060	05/05/98	16198		05/05/98

PART NUMBER	PRODUCT CLASS	QUANTITY ORDERED	UNIT/MEAS.
33290	351	3394.00	LB

.076 PHOB C1018 MANDREL

Finish: PHOS
Packaging: 30" REEL REEL
Tensile: 105/120,000
Clearance: $\pm .0005$
Pacific: Textron M125 rev.1

TNN125-076 600N MAX
ER REEL.TRY TO BTAY AT
10 TENS.

CHERRY TEXTRON
C29076
RAW MATERIAL
CERTIFICATION

JUL 20 1998

6-6
30

[illegible]

Gentlemen:

Based on our supplier's ladle analysis and our mechanical testing, we certify that the above material meets the following specifications:

Chemical Analysis

Type: C1018

Heat No. A34868	Lot No.
--------------------	---------

C	Mn	P	S	Si
.18	.81	.015	.015	.20
Cr	Ni	Mo	Fe	Cu
Co	Ti	Al	Cb	Ta
Mg	Zr	N	Other:	

STATE OF PENNSYLVANIA)
COUNTY OF LANCASTER)

SUBSCRIBED AND SWORN THIS
17th day of JULY, 1978

before the undersigned, who does hereby certify
that under the laws of the State aforesaid, he is
duly authorized to administer oaths.

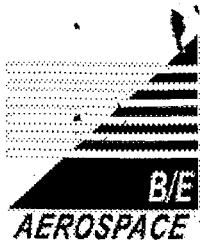
duly authorized to administer oaths.
Hena P. Gantz (Signed)
 Notary Public

Notarial Seal
Dena L. Plautz, Notary Public
Mt. Joy Boro, Lancaster County
My Commission Expires Dec. 21, 2000
Member, Pennsylvania Association of Notaries

Mount Joy Wire Corporation

**1000 E. Main Street
Mount Joy, PA 17552-9506**

CERTIFIED TEST REPORT



B/E Aerospace, Inc.

Page: 1 of 1

CONSUMABLES MANAGEMENT

P.O. Box 025263, Miami, FL 33102-5263 • Tel: 305.925.2600 • Fax: 305.507.7191
Plant Location: 10000 N.W. 15th Terrace, Miami, FL 33172 • SITA: MIAMMCR
www.beconsumables.com

Shipped From: 10000 NW 15 TERRACE, MIAMI, FL 33172


Material Certification

The items set forth on the purchase order referred to below have been visually inspected and the dimensions thereof have been measured by us, and based on the aforesaid, as well as the representation made to us by the manufacturers of the items subject of such purchase order, we hereby certify that such items are in conformity with all current governmental and manufacturer's requirements, specifications, drawings, and conform to the purchase order requirements. Said items are in new condition and have not been obtained from any U.S. Government or Military source and are traceable to B/E Aerospace, Inc.

FIRM: DART AEROSPACE LTD

PURCHASE ORDER#: PO23495

LINE#	QUANTITY	U/M	PART-NUMBER	CUST REF#	LOT-NUMBER	MANUFACTURER	CCODE	MFR DATE	EXP DATE
9	100	EA	CCR264SS3-3		97436009	CHERRY AEROSPACE SAN 11815			


Jason Lewis
Vice President of Quality

03/25/14

Inv # 03/25/14



CHERRY®
AEROSPACE
SPS Fastener Division, a PCC Company

Cherry Aerospace
1224 East Warner Avenue
Post Office Box 2157
Santa Ana, CA 92707-0157
USA



PACKING LIST

Order No: SO325909
Order Date: 06/12/08
Print Date: 01/02/11

Page: 1



Sold-To: 10015341

Ship-To: 19000244

S O L D T O	B/E AEROSPACE
	PO BOX 025263
	MIAMI, FL 33102-5263
	USA

S H I P T O	B/E AEROSPACE INC C.M.
	10000 N.W. 15TH TERRACE
	MIAMI, FL 33172
	USA

Salesperson (s):110

Purchase Order: 0FJ317

Credit Terms: Net 30
Net 30

Ship Via: YRC

FOB: Origin - Collect

Remarks:

IF UNDER 150# SHIP FEDEX GROUND COLLECT ACCOUNT# 0331-0149-0
IF OVER 150# SHIP FED EX NATIONAL ACCOUNT# 018757 - DO NOT INSURE
DO NOT PREPAY AND ADD TO ANY OF THE ABOVE METHODS
DO NOT SHIP EARLIER THAN TWO (2) WEEKS PRIOR TO DUE DATE, UNLESS SPECIFIED.

BRITISH AEROSPACE APPROVAL# BAe/AG/30158/MAA to BAe/AG/QC/SC1 PART 3
AIRBUS APPROVAL# 30114

GOODS OF UNITED STATES ORIGIN

FASTENERS ECCN: 9A991d SCHEDULE B# 8803300010
TOOLS ECCN: EAR99 SCHEDULE B# 8467290095

Ln	Item Number	Site T LocationLot/Serial	Qty Open		UM	Promised Shipped	
			Qty	Open			
10	CCR264SS-3-03	1600			EA	02/01/11	
	Customer Item: S1972-3						
	*IF APPLICABLE, PART MEETS DFARS CLAUSE 252.225-7014 ALT I						
	*PREFERENCE FOR DOMESTIC SPECIALTY METALS						
		D0603 87436009	38600.0			()	
		EZLINE-2 87410621	12800.0			()	

TEST REPORTS ENCLOSED = DO NOT DESTROY

These commodities, technology or software were exported from the United States in accordance with the Export Administration Regulations. Diversion contrary to US law is prohibited

Packing List

150



CHERRY®
AEROSPACE
 SPS Fastener Division, a PCC Company

Cherry Aerospace
 1224 East Warner Avenue
 Post Office Box 2157
 Santa Ana, CA 92707-0157
 USA



PACKING LIST

Order No: SO325909 Page: 1
 Order Date: 06/12/08
 Print Date: 01/02/11



Sold-To: 10015341

Ship-To: 19000244

S O L D T O	B/E AEROSPACE
	PO BOX 025263
	MIAMI, FL 33102-5263
	USA

S H I P T O	B/E AEROSPACE INC C.M.
	10000 N.W. 15TH TERRACE
	MIAMI, FL 33172
	USA

Salesperson (s):110

Purchase Order: 0FJ317

Credit Terms: Net 30
 Net 30

Ship Via: YRC
 FOB: Origin - Collect

Remarks:

IF UNDER 150# SHIP FEDEX GROUND COLLECT ACCOUNT# 0331-0149-0
 IF OVER 150# SHIP FED EX NATIONAL ACCOUNT# 018757 - DO NOT INSURE
 DO NOT PREPAY AND ADD TO ANY OF THE ABOVE METHODS
 DO NOT SHIP EARLIER THAN TWO (2) WEEKS PRIOR TO DUE DATE, UNLESS SPECIFIED.

BRITISH AEROSPACE APPROVAL# BAe/AG/30158/MAA to BAe/AG/QC/SC1 PART 3
 AIRBUS APPROVAL# 30114

GOODS OF UNITED STATES ORIGIN

FASTENERS ECCN: 9A991d SCHEDULE B# 8803300010
 TOOLS ECCN: EAR99 SCHEDULE B# 8467290095

Ln	Item Number	Site T Location	Lot/Serial	Qty Open Qty to Ship	UM	Promised Shipped
10	CCR264SS-3-03		1600		EA	02/01/11
	Customer Item: S1972-3					
	*IF APPLICABLE, PART MEETS DFARS CLAUSE 252.225-7014 ALT I					
	*PREFERENCE FOR DOMESTIC SPECIALTY METALS					
			D0603 87436009	38600.0		()
			EZLINE-2 87410621	12800.0		()

TEST REPORTS ENCLOSED = DO NOT DESTROY

These commodities, technology or software were exported from the United States in accordance with the Export Administration Regulations. Diversion contrary to US law is prohibited

CERTIFICATION

ATTENTION: PURCHASING DEPARTMENT

The material and/or parts we are furnishing in this shipment (as shown above) on the subject Purchase Order conform to the order and applicable specifications, Evidence that the material and/or parts meet the specifications and results of all tests for each lot affected will be in our files and will be available for your inspection at any reasonable time.

Quality Assurance Representative

Signed

[Signature]



CHERRY AEROSPACE
SPS Fastener Division, a PCC Company

1224 East Warner Avenue
Santa Ana, CA 92707-0157



Accredited
Nadcap

Chemical Processing
Heat Treating
ISO/IEC 17025
Material Testing Lab

Final Inspection & Test Report Cherry® Rivet

An ISO9001 and AS9100 registered company. OASIS #6111041606

Part Numbers	Rev	Proc. Spec.	Rev	Lot I.D. No.: 87436009 Lot Size: 100,000 MFG. Date: January 01, 2011
CCR264SS-3-03	AD	PS-NPR-200	M	

ASSEMBLY DATA

TYPE	ID #	CERT #	MATERIAL	FINISH	LUBE
Rivet	87436009	A66104	C-1018/ ASTM-A 510/ ANNEALED	CAD PL / QQ-P-416,T2,C2	Rust Inhibit
Stem	87434376	A66089	Carbon Steel per ASTM A-510	None	Rust Inhibit

W.O. #: 5422890

Final Lube: None

QUALITY CONFORMANCE/ACCEPTANCE RESULTS

MIN REQ'D	INSTALLED SHEAR				TENSION			
	105				155			
SAMPLE SIZE	26				26			
SPECS								
RESULTS	184	193	181	190	225	218	217	216
	194	182	196	200	227	234	229	224
	195	202	209		218	219	219	
	187	194	188		189	227	232	
	191	196	192		230	217	232	
	197	192	195		219	227	228	
LOAD VALUES IN POUNDS	184	196	209		226	227	227	
	181	186	202		218	217	217	

<u>PCS.</u>	<u>ITEM</u>	<u>STATUS</u>	<u>PCS.</u>	<u>ITEM</u>	<u>STATUS</u>
125	EXAMINATION	PASS	32	INSTALLATION (Min and Max Grips)	PASS

Comments:

Blind Fastener

Tr. Rev.:

Rev. Date: 1/1/2011

Inspector

V Iriarte



Insp. Control #: 282906

The parts contained in this shipment have been manufactured and inspected in accordance with TSO-C148. The conditions and tests required for TSO approval of this article are minimum performance standards. Aircraft fasteners approved under this TSO are not necessarily interchangeable with other aircraft fasteners approved under this TSO. Fasteners of similar dimensional properties may have widely varying performance and metallurgical properties. Substitution of parts may only be done if acceptable to or approved by the Administrator.

This test report shall not be reproduced except in full, without the written approval of the laboratory.
The recording of false, fictitious, or fraudulent statement or entries on the certificate may be punished as a felony under Federal law.



CHERRY AEROSPACE
APS Division, a PCC Company

1224 East Warner Avenue
Santa Ana, CA 92707-0157



Accredited
Nadcap

Chemical Processing
Heat Treating
ISO/IEC 17025
Material Testing Lab

Final Inspection & Test Report

Cherry® Rivet

An ISO9001 and AS9100 registered company. OASIS #6111041606

Lot I.D. No.:	87436009
Rev:	-

Customer Parts List

<u>Customer Part Number</u>	<u>Rev</u>	<u>Proc. Spec.</u>	<u>Rev</u>
S1972-3	D	PS-NPR-200	M



WireTech, Inc.

6440 E. Canning Street
Los Angeles, CA 90040
Phone (323) 722-4933
Fax (323) 721-2738

SOLD TO

CHERRY AEROSPACE LLC
1224 E. WARNER AVENUE
SANTA ANA, CA 92705-5414
USA

WORK ORDER
080093

CERTIFICATION

HEAT NO.
10058980
SALES ORDER / RLS
837410 / 1

ISO 9001-2000 REGISTERED



MECHANICAL TESTING
CERT # 911.01

CUSTOMER P.O.	CUSTOMER PART	QUANTITY	CARRIERS	LADING NO	SHIPMENT DATE					
PO120571	m114.0900	1,035 Lbs	1	00087256	12/10/2010					
SPECIFICATION C201018-300900A C-1018, AKFG, CHQ WIRE, SAIP Zinc Phosphate, Lime & Stearate Coating, Size:0.0895/0.0905 Specifications: M114-090, REV M, ASTM-A510,ASTM-A545										
CERTIFICATION REQUIREMENTS										
Chemical Properties										
C	Si	Mn	P	S	Cu	Ni	Cr	Mo	Al	N
.17	.08	.78	.013	.008	.10	.05	.07	.02	.037	.006
Physical Properties										
Mill Source Charter										
Mechanical Properties										
TEST	UNITS	Results								
Tensile Strength	KSI	84.8								

DEC 27 2010

303
AUDIT

A66104

Merchandise covered by this invoice is warranted to be free from defects in workmanship or material but not for any specific length of time, type or measure of service. No claim for allowance will be recognized unless presented in writing within 10 days time after receipt of material. Our maximum liability for any claim predicated upon defective merchandise is limited to replacement of it, or to repayment of it, or to repayment of the purchase price thereof, as we elect. Material cut to specific length or size cannot be returned for credit and request for cancellation of such orders will not be considered if manufacture has been commenced. Buyer, by acceptance of the merchandise covered by this invoice, agrees to the foregoing terms and conditions and those set forth on the reverse hereof. "The recording of false, fictitious or fraudulent statements or entries on this document may be punished as a felony under Federal statutes including Federal law, Title 18, Chapter 47."

REPRODUCTION OF THIS CERTIFICATION IS NOT ALLOWED UNLESS IN FULL.

Wire Tech, Inc. metallurgical laboratory is accredited in the following test: chemical analysis per ASTM E 415, mechanical testing per ASTM A 370, Rockwell hardness per ASTM E 18, metallographic mount preparation per ASTM E 3, decarburization depth per ASTM E 1077, IFI 140, inclusion rating per ASTM E 45, decarburization performed as per IFI 140.

The reported Chemical and Physical Properties are Mill Source results. Transcribed from mill certificates. HRB(W) are hardness results performed with a 1/16" carbide ball. Unless otherwise specified, HRB and HRC results are conversions from ASTM A370 tables 1 and 2. *Test result not covered by our current A2LA accreditation. Tests which have been undertaken by a subcontractor laboratory that is not accredited are not endorsed by A2LA or covered by Wire Tech, Inc. A2LA accreditation.

TEST RESULTS RELATE ONLY TO THE ITEMS TESTED.

"LATEST REVISIONS OF ASTM"

Material is free of mercury, radium, or alpha contamination.



CHARTER STEEL

A Division of
Charter Manufacturing Company, Inc.

EMAIL

1658 Cold Springs Road
Saukville, Wisconsin 53080

(262) 268-2400

1-800-437-8789

FAX (262) 268-2570

CHARTER STEEL TEST REPORT

Reverse Has Text And Codes

Wiretech Incorporated
6440 East Canning Street
Los Angeles, CA-90040
Kind Attn :Cert To Contact

Cust P.O.	006480
Customer Part #	1018C3C055-C
Charter Sales Order	70009208
Heat #	10058980
Ship Lot #	1007413
Grade	1018 R AK FG RHQ 7/32
Process	HR
Finish Size	7/32

I hereby certify that the material described herein has been manufactured in accordance with the specifications and standards listed below and on the reverse side, and that it satisfies these requirements.

Test Results of Heat Lot# 10058980

Lab Code: 7388	C	MN	P	S	SI	NI	CR	MO	CU	SN	V
CHEM %Wt	.17	.78	.013	.008	.08	.05	.07	.02	.1	.006	.001
	AL	N	B	TI	NB						
	.037	.006	.0001	.001	.001						

JOMINY(HRC) JOM01 JOM02 JOM03
43 23 21

JOMINY SAMPLE TYPE ENGLISH = C
CHEM. DEVIATION EXT. -GREEN =

	# of Tests	Test Results of Rolling Lot# 1007413	Mean Value	
TENSILE	1	Min Value 75.4	75.4	TENSILE LAB = 0358-02
REDUCTION OF AREA	1	73	73	RA LAB = 0358-02

NUM DECARB = 1 AVE DECARB = .001
REDUCTION RATIO = 803:1

Specifications:

Manufactured per Charter Steel Quality Manual Rev 8,12-05-07
Meets customer specifications with any applicable Charter Steel exceptions for the following customer documents:
Customer Document = COP 3000 Revision = R Dated = 24-OCT-07

Additional Comments:

DEC 27 2010



A66104

Charter Steel
Saukville, WI, USA



Page 1 of 1

Janice Barnard
Janice Barnard
Manager of Quality Assurance
04/27/2010

Rem: Load1,Fax0,Mail0



WireTech, Inc.

6440 E. Canning Street
Los Angeles, CA 90040
Phone (323) 722-4933
Fax (323) 721-2738

SOLD TO

CHERRY AEROSPACE LLC
1224 E. WARNER AVENUE
SANTA ANA, CA 92705-5414
USA

WORK ORDER
079611

CERTIFICATION

HEAT NO.
C80712
SALES ORDER / RLS
837233 / 1
ISO 9001-2000 REGISTERED



MECHANICAL TESTING
CERT # 911.01

CUSTOMER P.O. VPO92778	CUSTOMER PART M067-060 ✓	QUANTITY 2,094 Lbs	CARRIERS 2	LADING NO 00087214	SHIPMENT DATE 12/08/2010					
SPECIFICATION C201018-300600A C-1018, AKFG, CHQ WIRE, SAIP Zinc Phosphate, Lime & Stearate Coating, Size:0.0595/0.0605 Specifications: ,ASTM-A510-08,ASTM-A545-82, M067-0600, REV. T										
CERTIFICATION REQUIREMENTS										
Chemical Properties										
C	Si	Mn	P	S	Cu	Ni	Cr	Mo	Al	N
.18	.04	.74	.005	.006	.03	.02	.02	.005	.046	.003
Physical Properties										
Mill Source Ivaco										
Mechanical Properties										
TEST Tensile Strength		UNITS KSI		Results 118.0						

Merchandise covered by this invoice is warranted to be free from defects in workmanship or material but not for any specific length of time, type or measure of service. No claim for allowance will be recognized unless presented in writing within 10 days time after receipt of material. Our maximum liability for any claim predicated upon defective merchandise is limited to replacement of it, or to repayment of it, or to repayment of the purchase price thereof, as we elect. Material cut to specific length or size cannot be returned for credit and request for cancellation of such orders will not be considered if manufacture has been commenced. Buyer, by acceptance of the merchandise covered by this invoice, agrees to the foregoing terms and conditions and those set forth on the reverse hereof. "The recording of false, fictitious or fraudulent statements or entries on this document may be punished as a felony under Federal statutes including Federal law, Title 18, Chapter 47."

REPRODUCTION OF THIS CERTIFICATION IS NOT ALLOWED UNLESS IN FULL.

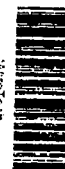
Wire Tech, Inc. metallurgical laboratory is accredited in the following test: chemical analysis per ASTM E 415, mechanical testing per ASTM A 370, Rockwell hardness per ASTM E 18, metallographic mount preparation per ASTM E 3, decarburization depth per ASTM E 1077, IFI 140, inclusion rating per ASTM E 45, decarburization performed as per IFI 140. The reported Chemical and Physical Properties are Mill Source results. Transcribed from mill certificates. HRB(W) are hardness results performed with a 1/16" carbide ball. Unless otherwise specified, HRB and HRC results are conversions from ASTM A370 tables 1 and 2. *Test result not covered by our current A2LA accreditation. Tests which have been undertaken by a subcontractor laboratory that is not accredited are not endorsed by A2LA or covered by Wire Tech, Inc. A2LA accreditation.

TEST RESULTS RELATE ONLY TO THE ITEMS TESTED.
"LATEST REVISIONS OF ASTM"

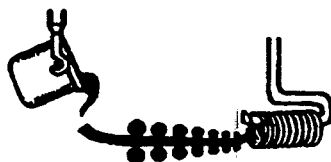
Material is free of mercury, radium, or alpha contamination.



DEC 18 2010



A66089



10624 0058 **WIRETECH, INC.**
6440 E. CANNING ST. SPUR 6604
COMMERCE, CA
90040

MILL TEST CERTIFICATE

This report contains analysis data that were produced under subcontract by laboratory Arcelor/Mittal Canada, Standards Council of Canada certificate number 270.

NVLAP only covers the chemistry presented within this certificate. All other data is not covered by the NVLAP accreditation.

IVACO ROLLING MILLS LP

P.O. BOX 322, L'ORIGINAL, ONTARIO, CANADA K0B 1K0
TEL: (613) 675-4671 FAX: (613) 675-6866



Lab Code 200143-0

ATTENTION: A Stephan/M Martinez VIA: EMAIL

Date Rolled 10-Sep-2010 Date Chemical Analysis Performed 21-May-2010

P.O. Number	Order Number	Heat Number	Customer Spec	Spec Rev. No.	Customer Part No.	Billet Order	Grade	Diameter																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
006527	10127492	C80712	1018AKFG	REV S 21/21/2009	1018-03C055-C	301027	1018AK CHQ	5.50 mm																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
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This is to certify that heat number C80712 is in conformance with the required specifications.

Heat analysis obtained by test methods ASTM E415 and ASTM E1019.
*Minimum and maximum refer to the required customer specification.

This is to certify that the material is in conformance with the required specifications.

Radioactive emissions are at background levels.

This steel was produced using a fine grain steelmaking practice (6-11).

Aluminum to Nitrogen ratio = 15.333

Results of Physical Testing			
	UTS (KSI)	ROA (%)	DIA. (in)
Averages	72.30	68.55	.2169



DEC 18 2010

WireTech
C80712



A66089

APPROVED BY: 

Supervisor, Chemistry Laboratory and Billet Inspection

ISSUED BY QUALITY ASSURANCE: 

Date: 13 Sep 2010

Specification Clerk

This Certificate shall not be reproduced except in full, without the written approval of Ivaco Rolling Mills LP, a Heico Company. This certificate is not to be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government.

The following statements are applicable to the material described on the front of this Test Report:

1. Except as noted, the steel supplied for this order was melted, rolled, and processed in the United States.
2. Mercury was not used during the manufacture of this product, nor was the steel contaminated with mercury during processing.
3. Unless directed by the customer, there are no welds in any of the coils produced for this order.
4. The laboratory that generated the analytical or test results can be identified by the following key:

Certificate Number	Lab Code	Laboratory		Address
0358-01	7388	CSSM	Charter Steel Melting Division	1653 Cold Springs Road, Saukville, WI 53080
0358-02	8171	CSSR/CSSP	Charter Steel Rolling/Processing Division	1658 Cold Springs Road, Saukville, WI 53080
0358-03	123633	CSFP	Charter Steel Ohio Processing Division	6255 US Highway 23, Risingsun, OH 43457
0358-04	125544	CSCM/CSCR	Charter Steel Cleveland	4300 E. 49th St., Cuyahoga Heights, OH 44125-1004
.	.	--	Subcontracted test performed by laboratory not in Charter Steel system	

5. When run by a Charter Steel laboratory, the following tests were performed according to the latest revisions of the specifications listed below, as noted in the Charter Steel Laboratory Quality Manual:

Test	Possible Laboratory	Specification
Chemistry Analysis	CSSM, CSCM/CSCR	ASTM E415; ASTM E1019
X-ray Fluorescence Stainless and Alloy Steel	CSCM/CSCR	ASTM E572
Macroetch	CSSM, CSCM/CSCR	ASTM E381
Hardenability (Jominy)	CSSM, CSCM/CSCR	ASTM A255; SAE J406; JIS G0561
Grain Size	CSSM	ASTM E112
Tensile Test	CSSR/CSSP, CSFP, CSCM/CSCR	ASTM E8; ASTM A370
Rockwell Hardness	All labs	ASTM E18; ASTM A370
Microstructure (spheroidization)	CSSR/CSSP, CSFP	ASTM A892
Inclusion Content (Methods A, E)	CSSR/CSSP, CSCM/CSCR	ASTM E45

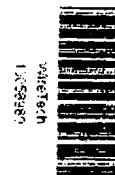
Charter Steel has been accredited to perform all of the above tests by the American Association for Laboratory Accreditation (A2LA). These accreditations expire 01/31/11.

All other test results associated with a Charter Steel laboratory that appear on the front of this report, if any, were performed according to documented procedures developed by Charter Steel and are not accredited by A2LA.

6. The test results on the front of this report are the true values measured on the samples taken from the production lot. They do not apply to any other sample.
7. This test report cannot be reproduced or distributed except in full without the written permission of Charter Steel. The primary customer whose name and address appear on the front of this form may reproduce this test report subject to the following restrictions:
 - It may be distributed only to their customers
 - Both sides of all pages must be reproduced in full
8. This certification is given subject to the terms and conditions of sale provided in Charter Steel's acknowledgement (designated by our Sales Order number) to the customer's purchase order. Both order numbers appear on the front page of this Report.
9. Where the customer has provided a specification, the results on the front of this test report conform to that specification unless otherwise noted on this test report.



DEC 27 2010



A66104



B/E Aerospace, Inc.

Page: 1 of 1

CONSUMABLES MANAGEMENT

P.O. Box 025263, Miami, FL 33102-5263 • Tel: 305.925.2600 • Fax: 305.507.7191
Plant Location: 10000 N.W. 15th Terrace, Miami, FL 33172 • SITA: MIAMMCR
www.beconsumables.com

Shipped From: 10000 NW 15 TERRACE, MIAMI, FL 33172


Material Certification

The items set forth on the purchase order referred to below have been visually inspected and the dimensions thereof have been measured by us, and based on the aforesaid, as well as the representation made to us by the manufacturers of the items subject of such purchase order, we hereby certify that such items are in conformity with all current governmental and manufacturer's requirements, specifications, drawings, and conform to the purchase order requirements. Said items are in new condition and have not been obtained from any U.S. Government or Military source and are traceable to B/E Aerospace, Inc.

FIRM: DART AEROSPACE LTD

PURCHASE ORDER#: PO23495

LNE#	QUANTITY	U/M	PART-NUMBER	CUST REF#	LOT-NUMBER	MANUFACTURER	CCODE	MFR DATE	EXP DATE
4	50	EA	AN4C21A		16613	AIRPASCO INDUSTRIES	3Z958		


Jason Lewis
Vice President of Quality

03/25/14

Airfasco Industries, Inc.

2655 Harrison Ave SW
Canton, OH 44706
Ph: 330-430-6190, Fax: 330-430-6199

Packing Slip

Original

Invoice #: 115751

Invoice Date: 10/6/2009

Time: 11:12:05 AM

Page: 1

To:

M&M AEROSPACE HARDWARE
PO BOX 025263
MIAMI, FL 33102
USA
Ph: 305-592-5155 Fax: 305-591-8357 PURCHAS

Ship To:

M&M AEROSPACE HARDWARE
10000 NW 15TH TERRACE
MIAMI, FL 33172

Cust. PO#: 0HE167

Order Date: 10/15/2008

Prepared By:

Customer #: 12726

Buyer:

Terms: NET 60

of Items: 2

Sales Order: 91907

VAT #:

FOB:

Ship Via: FEDEX GROUND COShip Via Acc: 0331-0149-0

of Boxes: 10

Ship Log #: 1

Cust VAT #:

AWB:

Weight:

Ship Order:

Ship Date: 10/6/2009

Shipment:

Item	Part Number/Description	Shipped	BackOrd	CD			Unit Price	UOM	Total Amt
3	AN7-21A BOLT, AN Loc/Whse: Control #: 0-0	0	10000	NE				EA	
9	AN4C21A BOLT, AN Loc/Whse: Control #: 142534-1 L-16613 TEST REPORT L-16613 AIRFASCO TERMS AND REQUIREMENTS FOR APPROVAL OF PRODUCT, PROCEDURES, AND EQUIPMENT: THE QUALIFICATION OF PERSONNEL AND QUALITY MANAGEMENT SYSTEM REQUIREMENTS, THE POSITIVE AND APPLICABLE SPECIFICATIONS, DRAWINGS, PROCESS REQUIREMENTS, INSPECTION INSTRUCTIONS AND OTHER RELEVANT TECHNICAL DATA, THE TEST SPECIMENS FOR DESIGN APPROVAL, INSPECTION, INVESTIGATION, OR AUDITING, RELATIVE TO SUPPLIER NOTIFICATION TO ORGANIZATION OF NON-CONFORMING PRODUCT AND ARRANGEMENTS FOR ORGANIZATION APPROVAL OF SUPPLIER NON-CONFORMING MATERIAL, THE SUPPLIER TO NOTIFY THE ORGANIZATION OF CHANGES IN PRODUCT.	10000	0	NE				EA	

C OF C ENCLOSED

10 BOXES

1 PALLET

PARTS MADE IN USA.

THANK YOU!

Airfasco Industries, Inc.

2655 Harrison Ave SW
Canton, OH 44706
Ph: 330-430-6190, Fax: 330-430-6199.

Packing Slip

Original

Invoice #: 115751

Invoice Date: 10/6/2009

Time: 11:12:06 AM

Page: 2

To:

M&M AEROSPACE HARDWARE
PO BOX 025263
MIAMI, FL 33102
USA
Ph: 305-592-5155 Fax: 305-591-8357 PURCHAS

Ship To:

M&M AEROSPACE HARDWARE
10000 NW 15TH TERRACE
MIAMI, FL 33172

Cust. PO#: 0HE167

Order Date: 10/15/2008

Prepared By:

Customer #: 12726

Buyer:

Terms: NET 60

of Items: 2

Sales Order: 91907

VAT #:

FOB:

Ship Via: FEDEX GROUND COShip Via Acc: 0331-0149-0

of Boxes: 10

Ship Log #: 1

Cust VAT #:

AWB:

Weight:

Ship Order:

Ship Date: 10/6/2009

Shipment:

Item	Part Number/Description	Shipped	BackOrd	CD			Unit Price	UOM	Total Amt
	PROCESS DEFINITION AND, WHERE REQUIRED, OBTAIN ORGANIZATION APPROVAL, THE RIGHT OF ACCESS BY THE ORGANIZATION, THEIR CUSTOMER, AND REGULATORY AUTHORITIES TO ALL FACILITIES INVOLVED IN THE ORDER AND ALL APPLICABLE RECORDS, THE SUPPLIER TO FLOW DOWN TO SUB-TIER SUPPLIERS THE APPLICABLE REQUIREMENTS IN THE PURCHASING DOCUMENTS, INCLUDING KEY CHARACTERISTICS WHERE REQUIRED.								

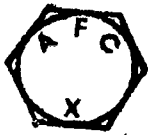
C OF C ENCLOSED

10 BOXES

1 PALLET

PARTS MADE IN USA

THANK YOU!



AIRFASCO INDUSTRIES

MANUFACTURER OF AEROSPACE PRODUCTS

2655 HARRISON AVE. SW
CANTON, OH 44706
PHONE: (330)430-6190
FAX: (330)430-6199

PHYSICAL AND CHEMICAL CERTIFICATION

DATE MFG.: 10/01/09

PART NO.: AN4C21A per NASM4C21A rev.1

AFC LOT NO.: 16613

QTY MFG.: 20,800

PROCUREMENT SPECIFICATION: Produced per NASM 6812 rev. 2

HEAT TREAT

VENDOR: Bodycote

CERTIFICATION NO.: 38-120762

PROCUREMENT SPECIFICATION: Heat Treat per AMS-H-6875 A

PLATING

VENDOR: AFC

CERTIFICATION NO.: 09-16613

PROCUREMENT SPECIFICATION: Passivate per AMS 2700, Method 2, QQ-P-35

MATERIAL

MILL: Carpenter

COUNTRY OF MELT: USA

HEAT: 554452

GRADE SPECIFICATION: Stainless Steel per MIL-S-18732, AMS 5628D, Type 431SS, .243"

431SS MATERIAL CHEMISTRY											
ELEMENT-ID.	-C-	-MN-	-P-	-S-	-SI-	-NI-	-CR-	-MO-	-CU-	-AL-	Other
LADLE	.150	.610	.016	.003	.570	1.710	16.16	.030	.050	.000	

PHYSICAL PROPERTIES				
PHYSICAL	TENSILE	YIELD	SHEAR	HARDNESS
REQUIRED	4,080 lbs.	3,130 lbs.	3,680 lbs.	HRC 26-32
ACTUAL	5,311 lbs.	4,772 lbs.	4,236 lbs.	HRC 30-31

Non-Destructive Magnetic Particle per ASTM-E-1444-05

We hereby certify that the above data is correct and that the fasteners have been manufactured and inspected in accordance with Airfasco Industries quality requirements.

Airfasco Industries
Quality Assurance Representative:

Wm. Dent



B/E Aerospace, Inc.

Page: 1 of 1

CONSUMABLES MANAGEMENT

P.O. Box 025263, Miami, FL 33102-5263 • Tel: 305.925.2600 • Fax: 305.507.7191
Plant Location: 10000 N.W. 15th Terrace, Miami, FL 33172 • SITA: MIAMMCR
www.beconsumables.com

Shipped From: 9835 NW 14TH ST, MIAMI, FL 33172


Material Certification

The items set forth on the purchase order referred to below have been visually inspected and the dimensions thereof have been measured by us, and based on the aforesaid, as well as the representation made to us by the manufacturers of the items subject of such purchase order, we hereby certify that such items are in conformity with all current governmental and manufacturer's requirements, specifications, drawings, and conform to the purchase order requirements. Said items are in new condition and have not been obtained from any U.S. Government or Military source and are traceable to B/E Aerospace, Inc.

FIRM: DART AEROSPACE LTD

PURCHASE ORDER#: PO23495

LINE#	QUANTITY	U/M	PART-NUMBER	CUST REF#	LOT-NUMBER	MANUFACTURER	CCODE	MFR DATE	EXP DATE
11	5	EA	MS20822-3D		22890	NELSON AEROSPCE/PRM 52930			


Jason Lewis
Vice President of Quality

03/25/14

PERMASWAGE

PERMASWAGE - Nelson Aerospace
A Designed Metal Connections, Inc. Company
10310 Norris Avenue
Pacoima, CA 91331
Ph: 818-686-0900
Fax: 818-686-0181

Pack Slip: 53563



Sales Order: 30390



Page: 1 of 1

Customer Packing Slip

Ship To:

B/E AEROSPACE CONSUMABLES MANAGEM
9835 NW 14TH ST
MIAMI FL 33172
USA

Verify AES requirements prior to shipment.

Sold To:

B/E AEROSPACE CONSUMABLES MANAG
10000 NW 15TH TERRACE
MIAMI FL 33172-2756
USA

Verify AES requirements prior to shipment.

Fax: 305-507-7192

Ship Date: 2/17/2014

Ship Via: FEDEX GROUND

F.O.B.: EX WORKS

Cust P.O.: 0RVP31

Salesperson: JIM THOMPSON

PO Line	Planned Qty	Shipped Qty	Back Order Qty	Part Number Description	Rev	Lot Number
---------	-------------	-------------	----------------	-------------------------	-----	------------

FEDEX GRD # 0331-0149-0

RELEASE # 8K6J0RVP31

2,500

2,231

269.00

MS20822-3D

F

22890

ELBOW

Sale Order / Line / Release: 30390 / 1 / 1

Customer PO Number: 0RVP31

Certificates Required:

Standard Certification: Yes
Full Certifications: No

First Article Inspection: No
Chemical/Physical: No

Material Certificate: No
FAIR per AS9102: No

1 Box 12x12x12 13 lbs

2 Boxes 15x15x10 17 lbs ea

AN, MS, AS, NAS and other industry standard parts controlled by ECCN 9A991 and HTS 8803.30.00.00

Products listed have not been exposed to mercury or mercury compounds during the manufacturing process.

!! MATERIAL TO BE RETURNED MUST HAVE PRIOR AUTHORIZATION BY PERMASWAGE -NELSON AEROSPACE SALES @ 818-686-0900 !!

WE HERBY CERTIFY THAT ALL PROVISIONS OF THE FAIR LABOR STANDARDS ACT ON 6/25/83 AS AMENDED HAVE BEEN FULLY COMPLIED WITH IN THE MANUFACTURE, PRODUCTION OR PURCHASE OF GOODS LISTED HEREON. ALL ITEMS ARE SUBJECT TO A 100% RESTOCKING CHARGE. ALL PAST DUE ACCOUNTS SHALL BEAR INTEREST AT THE RATE OF 1 1/2% PER MONTH (18% PER ANNUM).

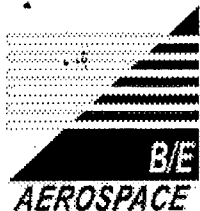
Certification of Conformance

NELSON AEROSPACE WARRANTS THAT THE ITEMS OF THIS SHIPPER WILL BE FREE FROM DEFECTS OF MATERIAL AND WORKMANSHIP AND, AS SET FORTH ON THE MATERIAL CERTIFICATION FORM, ACCOMPANYING THE ITEMS OF THIS INVOICE, ARE IN CONFORMITY WITH CONTRACT REQUIREMENTS AND SPECIFICATIONS, GOVERNMENT OR OTHERWISE. NELSON AEROSPACE DISCLAIMS ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ALL WARRANTIES OF MERCHANTABILITY AND OF THE FITNESS FOR A PARTICULAR PURPOSE. THE LIABILITY OF NELSON AEROSPACE IS EXPRESSLY LIMITED TO REPLACEMENT OF ANY ITEM WHICH IS REJECTED BECAUSE OF A DEFECT IN MATERIAL OR WORKMANSHIP. SUCH REPLACEMENT SHALL CONSTITUTE SATISFACTION OF ALL LIABILITY NELSON AEROSPACE MAY HAVE IN CONNECTION WITH SUCH ITEM, WHETHER LIABILITY IS BASED UPON CONTRACT RIGHTS, NEGLIGENCE OR OTHERWISE, AND IN NO EVENT SHALL NELSON AEROSPACE BE LIABLE FOR SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES. FURTHER, NELSON AEROSPACE MUST BE NOTIFIED OF A REJECTION OF AN ITEM WITHIN 30 DAYS AFTER RECEIPT BY THE CUSTOMER.

Country of Origin: MADE IN THE USA

BY RECEIVING DELIVERY OF THE GOODS COVERED BY THIS PACKING SLIP, BUYER EXPRESSLY ASSENTS TO THE TERMS AND CONDITIONS SET FORTH.

Manager of Quality Assurance or Designee



B/E Aerospace, Inc.

Page: 1 of 1

CONSUMABLES MANAGEMENT

P.O. Box 025263, Miami, FL 33102-5263 • Tel: 305.925.2600 • Fax: 305.507.7191
Plant Location: 10000 N.W. 15th Terrace, Miami, FL 33172 • SITA: MIAMMCR
www.beconsumables.com

Shipped From: 10000 NW 15 TERRACE, MIAMI, FL 33172


Material Certification

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FIRM: DART AEROSPACE LTD

PURCHASE ORDER#: PO23495

LNE#	QUANTITY	U/M	PART-NUMBER	CUST REF#	LOT-NUMBER	MANUFACTURER	CCODE	MFR DATE	EXP DATE
14	50	EA	MS21069L4		49348	PAOLO ASTORI	A3856		


Jason Lewis
Vice President of Quality

03/25/14



PAOLO ASTORI SPA
Via Mirabella, 9 - Maggiate Superiore
28013 Gattico (NO) - ITALY
Tel. (+39) 0322 838847
Fax (+39) 0322 880198
Web: www.paoloastori.com



DOCUMENTO DI TRASPORTO (D.d.T.)

N° 9

Data 03/01/2014

Pag. 1 / 2

9449

B/E AEROSPACE INC.CONSUMABLES MANAG
9835 NW 14TH ST.
MIAMI - FL
USA

Destinazione (Ship To):

370

B/E AEROSPACE INC.CONSUMABLES MANAG
9835 NW 14TH ST.

33172 MIAMI - FL US

Cod.Cliente

Pos.	Descrizione merce Part Number	Rif.Ordine (PO Number)	Data Ordine (PO Date)	Quantità (Quantity)	U.M.	N° Lotto (Batch #)	Peso (Weigh)	TR	QCIR	FAI
1	MS21069L4/NAS697A4 W0170KEM18(Rev. REV1)	OKEM18	07/08/2012	6472	N	49348	-		X	
2	MS21069L4/NAS697A4 W0170KEM18(Rev. REV1)	OKEM18	07/08/2012	7000	N	49348	-		X	
3	MS21069L4/NAS697A4 W0170KEM18(Rev. REV1)	OKEM18	07/08/2012	7000	N	49348	-		X	
4	MS21069L4/NAS697A4 W0170KEM18(Rev. REV1)	OKEM18	07/08/2012	7000	N	49348	-		X	
5	MS21069L4/NAS697A4 W0170KEM18(Rev. REV1)	OKEM18	07/08/2012	1528	N	49348	-		X	
6	MS21069L4/NAS697A4 W0170KEM18(Rev. REV1)	OKEM18	07/08/2012	7000	N	49348	-		X	
7	MS21069L4/NAS697A4 W0170KEM18(Rev. REV1)	OKEM18	07/08/2012	7000	N	49348	-		X	
8	MS21069L4/NAS697A4 W0170KEM18(Rev. REV1)	OKEM18	07/08/2012	7000	N	49348	-		X	
9	MS21069L4/NAS697A4 W0170KEM18(Rev. REV1)	OKEM18	07/08/2012	1000	N	49348	-		X	
10	MS21069L4/NAS697A4 W0170KEM18(Rev. REV1)	OKEM18	07/08/2012	7000	N	49348	-		X	
11	MS21069L4/NAS697A4 W0170KEM18(Rev. REV1)	OKEM18	07/08/2012	7000	N	49348	-		X	
12	MS21069L4/NAS697A4 W0170KEM18(Rev. REV1)	OKEM18	07/08/2012	7000	N	49348	-		X	
13	MS21069L4/NAS697A4 W0170KEM18(Rev. REV1)	OKEM18	07/08/2012	7000	N	49348	-		X	

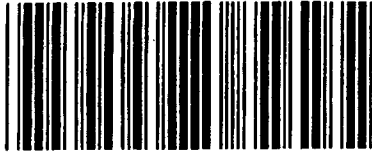
- SUPPLIES RELEASED IN ACCORDANCE WITH REQUIREM. OF BAE/AG/SC1 PART 3- APPROVAL # BAE/AG/30631/MAA AND WITH AIRBUS SAS APPROVAL # 204788 Se sotto 150 lbs sped con fedex ground, account #0331-0149-0,mark:collect;se sopra 150 lbs sped con fedex economy,account #018757

Aspetto esteriore merce	Comprende DdT n°	Segue su DdT n°
Tramite spedizione VETTORE	Modalità di consegna PORTO ASSEGNATO	Firma conducente
Causale trasporto VENDITA PRODUZIONE	Data inizio trasporto	Firma destinatario
Primo vettore FEDERAL EXPRESS EUROPE INC. # 327667348	Data ritiro merce	Firma primo vettore
Secondo vettore	Data ritiro merce	Firma secondo vettore

AI SENSI DELL'ART.13 D.LGS 196 DEL 30/06/2003 IL DESTINATARIO PUO' AVERE ACCESSO AI SUOI DATI E CHIEDERNE LA MODIFICA,COME PREVISTO DALL'ART.7 DEL D.LGS 196 DEL 30/06/2003, SCRIVENDO A PAOLO ASTORI SPA, VIA MIRABELLA 9, 28013 MAGGIATE SUPERIORE - GATTICO (NO)

**PAOLO ASTORI SPA**

Via Mirabella, 9 - Maggiate Superiore
28013 Gattico (NO) - ITALY
Tel. (+39) 0322 838847
Fax (+39) 0322 880198
Web: www.paoloastori.com

**DOCUMENTO DI TRASPORTO (D.d.T.)****N° 9****Data** 03/01/2014**Pag.** 2 / 2

9449

B/E AEROSPACE INC.CONSUMABLES MANAG
9835 NW 14TH ST.
MIAMI - FL
USA

Destinazione (Ship To):

370

B/E AEROSPACE INC.CONSUMABLES MANAG
9835 NW 14TH ST.

33172 MIAMI - FL US

Cod.Cliente

Pos.	Descrizione merce Part Number	Rif.Ordine (PO Number)	Data Ordine (PO Date)	Quantità (Quantity)	U.M.	N° Lotto (Batch #)	Peso (Weight)	TR	QCIR	FAI
14	MS21069L4/NAS697A4 W0170KEM18(Rev. REV1)	OKEM18	07/08/2012	7000	N	49348	-		X	
15	MS21069L4/NAS697A4 W0170KEM18(Rev. REV1)	OKEM18	07/08/2012	7000	N	49348	-		X	
16	MS21069L4/NAS697A4 W0170KEM18(Rev. REV1)	OKEM18	07/08/2012	7000	N	49348	-		X	

- SUPPLIES RELEASED IN ACCORDANCE WITH REQUIREM. OF BAE/AG/SC1 PART 3- APPROVAL # BAE/AG/30631/MAA AND WITH AIRBUS SAS' APPROVAL # 204788 Se sotto
150 lbs sped con fedex ground, account #0331-0149-0,mark:collect;se sopra 150 lbs sped con fedex economy,account #018757

Aspetto esteriore merce**Comprende DdT n°****Segue su DdT n°** 10**Tramite spedizione**
VETTORE**Modalità di consegna**
PORTO ASSEGNATO**Firma conducente****Causale trasporto**
VENDITA PRODUZIONE**Data inizio trasporto****Firma destinatario****Primo vettore****Data ritiro merce****Firma primo vettore**

FEDERAL EXPRESS EUROPE INC. # 327657348

Data ritiro merce**Firma secondo vettore**

**PAOLO ASTORI SPA**

Via Mirabella, 9 - Maggiate Superiore
28013 Gattico (NO) - ITALY
Tel. (+39) 0322 838847
Fax (+39) 0322 880198
Web: www.paoloastori.com

**CERTIFICATE OF CONFORMANCE****N° 9****Date 03/01/2014** Pag. 1 / 2**Purchased by:**

B/E AEROSPACE INC.CONSUMABLES MANAG
9835 NW 14TH ST.
MIAMI - FL
USA

Shipped to:

B/E AEROSPACE INC.CONSUMABLES MANAG
9835 NW 14TH ST.

33172 MIAMI - FL US

This is to certify that goods listed below have been inspected in our plant and are up to your orders and to the specifications of the drawings mentioned therein.

Country of origin is ITALY.

Pos.	Part Number	Purchase Order	PO Date	Quantity	U.M.	Batch #	Cure Date Expiry Date
1	MS21069L4/NAS697A4 W0170KEM18(Rev. REV1)	OKEM18	07/08/2012	6472	N	49348	
2	MS21069L4/NAS697A4 W0170KEM18(Rev. REV1)	OKEM18	07/08/2012	7000	N	49348	
3	MS21069L4/NAS697A4 W0170KEM18(Rev. REV1)	OKEM18	07/08/2012	7000	N	49348	
4	MS21069L4/NAS697A4 W0170KEM18(Rev. REV1)	OKEM18	07/08/2012	7000	N	49348	
5	MS21069L4/NAS697A4 W0170KEM18(Rev. REV1)	OKEM18	07/08/2012	1528	N	49348	
6	MS21069L4/NAS697A4 W0170KEM18(Rev. REV1)	OKEM18	07/08/2012	7000	N	49348	
7	MS21069L4/NAS697A4 W0170KEM18(Rev. REV1)	OKEM18	07/08/2012	7000	N	49348	
8	MS21069L4/NAS697A4 W0170KEM18(Rev. REV1)	OKEM18	07/08/2012	7000	N	49348	
9	MS21069L4/NAS697A4 W0170KEM18(Rev. REV1)	OKEM18	07/08/2012	1000	N	49348	
10	MS21069L4/NAS697A4 W0170KEM18(Rev. REV1)	OKEM18	07/08/2012	7000	N	49348	
11	MS21069L4/NAS697A4 W0170KEM18(Rev. REV1)	OKEM18	07/08/2012	7000	N	49348	
12	MS21069L4/NAS697A4 W0170KEM18(Rev. REV1)	OKEM18	07/08/2012	7000	N	49348	
13	MS21069L4/NAS697A4 W0170KEM18(Rev. REV1)	OKEM18	07/08/2012	7000	N	49348	

- SUPPLIES RELEASED IN ACCORDANCE WITH REQUIREM. OF BAE/AG/SC1 PART 3- APPROVAL # BAE/AG/30631/MAA AND WITH AIRBUS SAS APPROVAL # 204788 Se sotto 150 lbs sped con fedex ground, account #0331-0148-0, mark:collect;se sopra 150 lbs sped con fedex economy, account #018757

15

Airbus approval # 204788 - BAE Approval # BAE/AG/30631/MAA - Complies with DFARS 252.225-7014.
Agusta-Westland Q500 approval # A/0047

All claims regarding the parts in subject must be reported to seller promptly. Credit or replacement of parts may be limited to those parts for which traceability has been maintained by the buyer. The seller manufacturing lot identification number and return authorization (RMA) must accompany all returns. Any discrepancy claimed by the Customer must be made in writing to seller not later than ninety (90) days after the shipping date. The liability of seller on parts found to be defective is limited to replacement or rework of such goods, at seller option, and in no case is to exceed the invoice value of such goods. Under no circumstance will seller be liable for damages or cost incurred by buyer or subsequent user beyond the invoiced value of the parts in subject.

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This is to certify that goods listed below have been inspected in our plant and are up to your orders and to the specifications of the drawings mentioned therein.

Country of origin is ITALY.

Pos.	Part Number	Purchase Order	PO Date	Quantity	U.M.	Batch #	Cure Date Expiry Date
14	MS21069L4/NAS697A4 W0170KEM18(Rev. REV1)	OKEM18	07/08/2012	7000	N	49348	
15	MS21069L4/NAS697A4 W0170KEM18(Rev. REV1)	OKEM18	07/08/2012	7000	N	49348	
16	MS21069L4/NAS697A4 W0170KEM18(Rev. REV1)	OKEM18	07/08/2012	7000	N	49348	

- SUPPLIES RELEASED IN ACCORDANCE WITH REQUIREM. OF BAE/AG/SC1 PART 3- APPROVAL # BAE/AG/30631/MAA AND WITH AIRBUS SAS APPROVAL # 204788 Se sotto 150 lbs sped con fedex ground, account #0331-0149-0,mark:collect;se sopra 150 lbs sped con fedex economy,account #018757

Airbus approval # 204788 - BAE Approval # BAE/AG/30631/MAA - Complies with DFARS 252.225-7014.
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QUALITY CONFORMANCE INSPECTION REPORT

COMPANY WITH
QUALITY SYSTEM
CERTIFIED BY DNV
= AS/EN/JISQ 9100 =

Sede legale: via Mirabella, 9 - MAGGIATE Sup. - 28013 GATTICO (NO) ITALY - TEL: 0322-838847 FAX: 0322-880198 www.paoloastori.com

STATEMENT OF CONFORMITY

THIS IS TO CERTIFY THAT PARTS HAVE BEEN PRODUCED, CONTROLLED AND ACCEPTED
ACCORDING TO THE REQUIREMENTS OF THE APPLICABLE SPECIFICATION CALLED BY THE PURCHASE
ORDER AND/OR THE APPLICABLE STANDARD DRAWING.
MATERIAL, HEAT AND SURFACE TREATMENTS AND MANUFACTURING PROCESSES ARE THE SAME AS
THOSE USED FOR THE QUALIFICATION APPROVAL.
SAMPLES SUBJECT OF ALL TESTS WERE BEEN SELECTED AT RANDOM FROM THE PRODUCTION BATCH
COVERED BY THIS DOCUMENT. COUNTRY OF ORIGIN ITALY.
THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF
PAOLO ASTORI SPA.

Mattia Valler 
Signature
Quality Representative

CUSTOMER	see attached COC
P.O.	see attached COC
PART NO.	MS21069L4 per NASM21069 REV SEE COC / NAS697A4
ASTORI CODE	10AD25A402M11
DESCRIPTION	NUT SELF-LOCKING, PLATE TWO LUG
PROCUREMENT SPEC.	NASM25027
BATCH NO.	49348
BATCH QUANTITY	250.000
QUANTITY DELIVERED	see attached COC

Description of component	Raw material specification	Raw material Batch no.	Heat N°	Heat treatment performed	Raw material in accordance with
NUT	SAE1042	-3028	7X640110	hardening & tempering	ASTM A29
OTHER					
OTHER					
OTHER					

All claims regarding the parts in subject must be reported to seller promptly. Credit or replacement of parts may be limited to those parts for which traceability has been maintained by the buyer. The seller's manufacturing lot identification number and return authorization (RMA) must accompany all returns. Any discrepancy claimed by the Customer must be made in writing to seller not later than ninety (90) days after the shipping date. The liability of seller on parts found to be defective is limited to replacement or rework of such goods, as seller option, and in no case is to exceed the invoice value of such goods. Under no circumstance will seller be liable for damages or cost incurred by buyer or subsequent user beyond the invoice value of the parts in subject.

Date: 12/12/13

Batch N° 49348



page 1 of 5



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SUMMARIZED TEST RESULTS

(all tolerances are expressed in metric and imperial units - test results are recorded as read on the MTE)

Characteristic	Inspection or test to be Performed	Applicable or not	Sample Inspected	Inspection Media	Test Result	Note
Examination of product:						
Design	Verify the design of the nut	A	ALL	VISUAL	OK	
Self-locking device (Major A)	Examination	A	80	VISUAL	OK	see table 1
Thread fit (Major B)	Go-no go gauge - test bolt application	A	32	BOLT GO-GAGE	OK	see table 2
Bearing surface conditions and squareness (Major B)	Check surface roughness and orthogonality error	A	32	OPTICAL COMPARATOR	OK	see table 3
Surface finish, plating or surface treatment (Major B)	Verify the compliance of the surface treatment and condition	A	32	VISUAL	OK	see table 4
Rivet hole location and alignment (Major B)	Measure the position and the distance	A	32	DIGITAL CALIPER	OK	see table 5
Height of nut (Major B)	Measure the dimension	A	32	DIGITAL CALIPER	OK	see table 6
Loose or hanging burrs (Minor)	Verify the presence of any kind of burrs	A	13	VISUAL	OK	see table 7
All other dimensional characteristics not covered above (Minor)	Measure all dimensions with reference on the applicable standard	A	13	DIGITAL CALIPER	OK	see table 8 see attachment
Axial Tensile strength (Table IX)	Verify if the nuts withstand the minimum axial strength	A	27	LOAD MACHINE	OK	see table 9
Locking torque	See below					
Max locking torque (Table IX)	Measure and record the torque value for 1st, 7th, 15th of each nut tested	A	27	LOAD MACHINE	OK	see table 10
Min breakaway torque (Table IX)	Measure and record the torque value for 1st, 7th, 15th of each nut tested	A	27	TORQUE METER	OK	see table 11
Torque out (Table IX)	Torque out value must be not less than the requested value (attribute)	N/A	-	TORQUE METER	OK	see table 12
Push out (Table IX)	Push out value must be not less than the requested value (attribute)	A	27	LOAD MACHINE	OK	see table 13
Discontinuities (Major B)	No cracks at all - Depths of discontinuities not more than values	A	32	VISUAL	OK	see table 14
23-hour stress embrittlement (10 pcs)	Evidence of complete absence of stress embrittlement (attribute)	A	10	VISUAL	OK	see table 15
Magnetic permeability (Table IX)	Cres nuts must have less a magnetic permeability less than 2.0 in air for a field strength of H=200	N/A	-	LOW MU INDICATOR	OK	see table 16
Inspection of packaging (All boxes)	Verify the correctness of packaging	A	ALL	VISUAL	OK	see table 17

Date: 12/12/13

Batch N° 49348

(12)

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QUALITY CONFORMANCE INSPECTION REPORT

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Table 1 - Self locking device - examination (control by attribute : ok/not ok)



OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK

Table 2 - Thread fit (control by attribute : go-nogo gage ok/not ok - bolt application)



OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK

Table 3 - Bearing surface max. squareness deviation admitted 0.13 mm (0.0051 in) max. measured 0.06 mm (0.0023 in)
Surface roughness max. value admitted 3.2 (125 micro in) max. measured 1.6 (63 micro in)

0.06	0.04	0.06	0.05	0.04	0.04	0.05	0.03	0.04	0.06	0.05	0.05	0.04	0.04	0.03	0.03
0.06	0.04	0.05	0.04	0.04	0.05	0.03	0.03	0.05	0.03	0.05	0.04	0.04	0.05	0.03	0.06
1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6

Table 4 - Surface finish, plating or surface treatment (control by attribute : ok/not ok)



Actual finishing CADMIUM PLATED IN ACC WITH AMS-00-P-416 TYPE II CLASS 2

LUBRICATED IN ACC WITH AS5272

OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK

Table 5 - Rivet hole location and alignment.

Dimension requested 14.28 +/-0.05 mm (0.562 +/-0.002 in) max. range measured 14.33 mm (0.564 in)



14.30	14.32	14.32	14.33	14.31	14.33	14.32	14.31	14.32	14.32	14.31	14.31	14.32	14.30	14.32	14.33
14.33	14.33	14.33	14.32	14.31	14.30	14.31	14.30	14.32	14.32	14.30	14.32	14.32	14.30	14.30	14.31

Table 6 - Height of nut Dimension requested 7.14 mm max (0.281 in max) max. range measured 6.18 mm (0.243 in)

6.13	6.17	6.15	6.13	6.18	6.14	6.14	6.17	6.14	6.13	6.16	6.12	6.16	6.15	6.18	6.12
6.17	6.15	6.10	6.16	6.13	6.15	6.12	6.12	6.18	6.18	6.15	6.15	6.12	6.18	6.14	6.18

Date: 12/12/13

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Table 7 - Loose or hanging burrs (control by attribute by means visual examination ok/not ok)

OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK			
----	----	----	----	----	----	----	----	----	----	----	----	----	--	--	--

Table 8 -All other dimensional characteristics not covered above (reference on the tolerances of the applicable standard dwg)

OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK			
----	----	----	----	----	----	----	----	----	----	----	----	----	--	--	--

Table 9 - Axial Tensile strength - Minimum load requested 20380 N (4586 lb) max. measured 21550 N (4849 lb)

21550	21550	21550	21550	21550	21550	21550	21550	21550	21550	21550	21550	21550	21550	21550	21550
21550	21550	21550	21550	21550	21550	21550	21550	21550	21550	21550					

Table 10 -Max locking torque -

Max. installation torque admitted 3.39 Nm (30.00 in-lb) max. measured 2.84 Nm (25.14 in-lb)

2.71	2.75	2.80	2.65	2.78	2.84	2.73	2.59	2.67	2.63	2.75	2.69	2.66	2.72	2.79	2.63
1.66	1.70	1.75	1.58	1.69	1.71	1.66	1.40	1.58	1.52	1.69	1.54	1.52	1.69	1.62	1.58
1.36	1.40	1.45	1.28	1.36	1.48	1.39	1.18	1.28	1.20	1.35	1.24	1.22	1.39	1.32	1.25
2.69	2.58	2.76	2.70	2.75	2.78	2.69	2.65	2.78	2.71	2.66					
1.58	1.41	1.63	1.66	1.62	1.69	1.54	1.52	1.69	1.65	1.50					
1.25	1.12	1.39	1.32	1.35	1.36	1.24	1.22	1.30	1.36	1.33					

Table 11- Min breakaway torque -

Min. breakaway torque requested 0.40 Nm (3.54 in-lb) min. measured 1.05 Nm (9.29 in-lb)

2.42	2.63	2.52	2.56	2.63	2.56	2.44	2.56	2.56	2.54	2.60	2.55	2.45	2.56	2.63	2.54
1.45	1.49	1.56	1.36	1.42	1.56	1.42	1.26	1.36	1.32	1.39	1.33	1.32	1.45	1.42	1.33
1.22	1.26	1.36	1.12	1.25	1.36	1.21	1.05	1.12	1.11	1.20	1.05	1.15	1.23	1.20	1.11
2.44	2.42	2.36	2.56	2.55	2.69	2.54	2.52	2.63	2.54	2.45					
1.36	1.22	1.41	1.45	1.42	1.47	1.36	1.33	1.42	1.45	1.32					
1.11	1.09	1.25	1.22	1.20	1.23	1.05	1.15	1.12	1.18	1.16					

Table12-Torque out-Minimum requested value (control by attribute :ok/not ok) N/A

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Table 13- Push out -Minimum requested value 556 N (125 lb) (control by attribute :ok/not ok) 610 N (137 lb)

OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK					

Date: 12/12/13

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page 4 of 5



QUALITY CONFORMANCE INSPECTION REPORT

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Table 14- Discontinuities-No cracks at all-no discontinuities with depth more than 0.13 mm (control by attribute : ok/not ok)
NDT MAGNETIC INSPECTION per ASTM-E-1444



OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK

Table 15 - 23-hour stress embrittlement (control by attribute : ok/not ok)



OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
----	----	----	----	----	----	----	----	----	----

Table 16- Magnetic permeability - (control by attribute : ok/not ok)N/A

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 17- Inspection of packaging - (control of each package unit of the shipment : ok/not ok with respect to the order requirements)

OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK

SAMPLING TABLES

TABLE FOR MAJOR A CHARACTERISTICS

BATCH SIZE	SAMPLE SIZE	AN	RN
<35,000	50	0	1
35,000<Q<150,000	80	0	1
150,000<Q<500,000	80	0	1

TABLE FOR MAJOR B CHARACTERISTICS

BATCH SIZE	SAMPLE SIZE	AN	RN
<35,000	20	0	1
35,000<Q<150,000	32	0	1
150,000<Q<500,000	32	0	1

TABLE FOR MINOR CHARACTERISTICS

BATCH SIZE	SAMPLE SIZE	AN	RN
<35,000	8	0	1
35,000<Q<150,000	13	0	1
150,000<Q<500,000	13	0	1

TABLE IX

BATCH SIZE	SAMPLE SIZE	AN	RN
<50,000	10	0	1
50,000<Q<100,000	15	0	1
Q>100,000	27	0	1

Date: 12/12/13

Batch N° 49348



page 5 of 5

Test report 2.2 DIN EN 10204		No. (ART) 1228894 Page 1/1 Date 19.11.2012	
No. (ART) 32/90/000850 Purchaser Guiseppe & Frat. Bonaiti SpA (ART) 23081 CALOLZIOCORTE (LC) ITALIEN	21.09.2012 No. (ART) 32/90/000850 Customer Guiseppe & Frat. Bonaiti SpA (ART) 23081 CALOLZIOCORTE (LC) ITALIEN		
Product Hot rolled wide strip (ART)		Works order No. 0001178366 (ART)	
Steel grade and terms of delivery C 45 (ART) DIN EN 10083 T.2/10.2006 CHI/2451 Rev.3-15.06.11 DIN EN 10051:2011-02 1		Dispatch note No. 0083995692 18.11.2012 Inspection WS (ART)	

Material data (ART-EN)					
Item	Quantity (EN)	Product No. (ART)	Heat No. (ART)	Cond. of delivery (EN)	Thickness x Width (EN-EN)
01	3	218794	7x640110	U	2,50 x 1300,0
Σ	3	Weight (EN)	26.680 kg	U: as rolled	

Ladle analysis (EN-EN)										
Heat No. (ART)	C %	Si %	Mn %	P %	S %	Ni %	Al %	Cu %	Cr %	
7x640110	0,451	0,174	0,74	0,013	0,001	0,017	0,027	0,012	0,223	
Heat No. (ART)	Mo %	V %								
7x640110	0,002	0,001								

Steel making: Basic oxygen process
(EN)

Our products are free of radioactive substances and do not exceed the clearing limit value of 100 Bq/kg, which guarantees the compliance with limit values given in the Radiation Protection Ordinance (StrlSchV) for the unrestricted clearance of solid material (StrlSchV Annex III, Section 5) for ferrous nuclides.

We hereby certify that the delivered material complies with the terms of the order.
(EN)

 Trademark
(ART)

Salzgitter Flachstahl GmbH
Chemnitzstr. 80
D-38276 Salzgitter
(ART)

Inspection Representative
(EN)

Krats

This certificate was prepared by a suitable data processing system and is valid without signature according to EN 10 204, section 2.



GIUSEPPE & F. LLI BONAITI S.p.A.
NASTRO E FILO DI ACCIAIO

Sede legale e amministrativa:
Piazza Verdi, 3/A
23801 CALOLZIOCORTE (LC)
tel. 0341 633080 fax 0341 633081
internet: www.bonaitigiuseppe.it
e-mail: info@bonaitigiuseppe.it

CERTIFICATO DI CONTROLLO

(Tipo 3.1 secondo norma EN 10204:2004)

Nr
918 del
29/01/13

Spett.
PAOLO ASTORI SPA
VIA MIRABELLA 9
28013 MAGGIATE SUPERIORE NO

Vs. Ord. 21796 del 21/11/12
Ns. Com. 32/002219-01 del 21/11/12
DDT N. **410** del **29.1.13**

PRODOTTO Cod.
NASTRO C45N SAE1042 MM.25,0X1,00

PAOLO ASTORI SPA

3028
RAW MATERIAL LOT

RISULTATI PROVE

FOGLIO DI LAVORAZIONE

FDL 1A 2012 004674

Documento N. 11815 del 6/12/12

Prova

RESISTENZA A TRAZIONE N/MM2 493

ALLUNGAMENTO % A80MM. 27,71

CARICO UNIT.SCOST.PROP. RP0.2 346,00

PIEGAMENTO TRASVERSALE 180° OK

Prova

RESISTENZA A TRAZIONE N/MM2 502

ALLUNGAMENTO % A80MM. 29,57

CARICO UNIT.SCOST.PROP. RP0.2 342,00

Certifichiamo che il prodotto è conforme alle richieste della conferma d'ordine.

LABORATORIO PROVE

L. Panzeri

ANALISI COLATA

(Verifica effettuata dal fornitore materia prima)

Colata **7X640110**

L. 40470 / 001 . E

C	Mn	Si	P	S	Al	Cr	Ca	Ni	Mo	V
0,451	0,740	0,174	0,013	0,001	0,027	0,223	0,012	0,017	0,002	0,001

10023 REV.2

Cap. Soc. € 1.200.000,00 i.v.
Cod. Fiscale, Reg. Imprese e Part. I.V.A. 00217630169
C.C.I.A.A. LC 40869 - Maco, LC 000953
Stabilimenti di produzione: Calolziocorte (LC) - Palazzago (BG)

Pag. 1



B/E Aerospace, Inc.

Page: 1 of 1

CONSUMABLES MANAGEMENT

P.O. Box 025263, Miami, FL 33102-5263 • Tel: 305.925.2600 • Fax: 305.507.7191
Plant Location: 10000 N.W. 15th Terrace, Miami, FL 33172 • SITA: MIAMMCR
www.beconsumables.com

Shipped From: 10000 NW 15 TERRACE, MIAMI, FL 33172

Material Certification

The items set forth on the purchase order referred to below have been visually inspected and the dimensions thereof have been measured by us, and based on the aforesaid, as well as the representation made to us by the manufacturers of the items subject of such purchase order, we hereby certify that such items are in conformity with all current governmental and manufacturer's requirements, specifications, drawings, and conform to the purchase order requirements. Said items are in new condition and have not been obtained from any U.S. Government or Military source and are traceable to B/E Aerospace, Inc.

FIRM: DART AEROSPACE LTD

PURCHASE ORDER#: PO23495

LIN#	QUANTITY	U/M	PART-NUMBER	CUST REF#	LOT-NUMBER	MANUFACTURER	CCODE	MFR DATE	EXP DATE
18	2100	EA	MS27039-1-08		66173	MAC FASTENERS	ORPT4		


Jason Lewis
Vice President of Quality

03/25/14

MACFASTENERS, INC.

1110 Enterprise Street

Ottawa, KS 66067

Phone: 785-242-8812

Fax: 785-242-4616

Packing List**Bill** B/E AEROSPACE CONSUMABLES MGMT**To:** 10000 NW 15TH TERRACE

MIAMI, FL 33172

Ship B/E AEROSPACE CONSUMABLES MGMT**To:** 9835 NW 14th Street

Miami, FL 33172

United States

Shipment No: 60056**Shipment Date:** 08/22/13**Ship Via:** United Parcel Service**Order Number:** 47082**Order Date:** 12/28/12**Customer Code:** BE AEROSPACE**Phone:** (305) 925-2600**PO Number:** OMAJ73**Terms:** Net 30 Days

LOT #66173

<u>Item</u>	<u>Quantity</u>				<u>Unit</u>	<u>Description</u>	<u>Job Number</u>
	<u>Open</u>	<u>Shipped</u>	<u>Back Ord</u>	<u>Canceled</u>			
4	250,000	265,000	0		M	MS27039-1-08 Screw machine pan head structural cross recessed	66173

MAC FASTENERS, INC.
1110 ENTERPRISE
OTTAWA, KANSAS 66067

**CERTIFICATE OF CONFORMANCE
AND
MANUFACTURER'S AFFIDAVIT**

CUSTOMER: B/E AEROSPACE

PO: 0MAJ73

PART NUMBER: MS27039-1-08

REV: 3

LOT NUMBER: 66173

MANUFACTURED QUANTITY: 265,000

MILL HEAT NUMBER: 8172011

COUNTRY OF ORIGIN: UNITED STATES OF AMERICA

DFARS 252.225.7009 Compliant

MERCURY FREE CERTIFICATION

MacFasteners Inc. certifies that the parts referenced in the above lot number do not contain Mercury or Mercury compounds, and were manufactured in a Mercury free environment.

We certify that the parts furnished against the above referenced purchase order were manufactured by MAC FASTENERS, INC. within the United States, and were processed in accordance with all applicable drawings and specifications.

Objective evidence of compliance is on file, subject to examination upon request.

DATE: 08/20/13


QUALITY ASSURANCE REPRESENTATIVE

MacFasteners, Inc. is an AS9100C Registered Company- SAI GLOBAL - 0058029

MAC FASTENERS, INC.
1110 ENTERPRISE
OTTAWA, KANSAS 66067

HEAT TREAT CERTIFICATION

CUSTOMER: B/E AEROSPACE

DATE: 08/20/13

PO NUMBER: 0MAJ73

MANUFACTURED QUANTITY: 265,000

PROCESSOR:

BODYCOTE MCLEAN - NADCAP ID 4464

LOT NUMBER: 66173

MATERIAL: TYPE 8740

PART NUMBER: MS27039-1-08

REVISION: 3

REQUIRED HARDNESS: 26 - 32 HRC

SAMPLE SIZE: 13

HARDNESS: 26 - 27 HRC

HEAT TREAT SPECIFICATION AS APPLICABLE: MIL-H-6875/AMS-H-6875/AMS2759/AMS5853/PS-1001

Notes:

The fasteners referenced in this report have been processed, inspected and certified by the Heat Treat Contractor in accordance with all applicable drawings and specifications. Heat Treatment has been verified in accordance with procurement specification and part drawing, by metallurgical and mechanical testing as applicable. Evidence of compliance as well as certification from the Heat Treat Contractor is on file and subject to examination upon request.


QUALITY ASSURANCE REPRESENTATIVE

MacFasteners, Inc. is an AS9100C Registered Company - SAI GLOBAL - 0058029

CHEMICAL & PHYSICAL TEST REPORT

MATERIAL				MATERIAL SPECIFICATION				MILL HEAT NUMBER			SUPPLIER		
TYPE 8740				MIL-S-6049/AMS6322				8172011			JOHNSTOWN		
C	Si	Mn	P	S	Cu	Ni	Cr	Mo	V	B	Fe	Al	Ti
.42	.26	.88	.007	.013	.08	.42	.48	.21	.002			.031	
	Co	N	Bi	Pb	Mg	Zn		Nb	Sn			Other	
		.0062							.005				

ULTIMATE TENSILE STRENGTH POUNDS	
2,750	2,760
2,800	2,780
2,780	2,820
2,810	2,800
2,790	2,800
2,800	
2,810	
2,770	
MIN. REQ.	2,500


DOUBLE SHEAR STRENGTH POUNDS / PSI	
TOO SHORT TO TEST PER NASM1312-13	
MIN. REQ.	

HARDNESS	
ROCKWELL "C" SCALE	
REQ.	26 - 32 HRC
SAMPLE SIZE	13
ACTUAL RESULTS	
26 - 27 HRC	

METALLURGICAL EXAMINATION			
Discontinuities	<input checked="" type="checkbox"/>	Carb/Decarb	<input checked="" type="checkbox"/>
Grain Flow	<input checked="" type="checkbox"/>	Microstructure	<input checked="" type="checkbox"/>
Grain Size	<input checked="" type="checkbox"/>	Appearance	<input checked="" type="checkbox"/>
Thread Inspection		System <input type="checkbox"/>	System <input checked="" type="checkbox"/>
FED-STD-H28/20 - ASME B1.3		21	23

NDT/ ADDITIONAL TESTS	
Magnetic Particle Inspection per ASTM E1444	<input type="checkbox"/>
Liquid Penetrant Inspection per ASTM E1417	<input type="checkbox"/>
Recess Torque Test	<input type="checkbox"/>
Head Marking	<input checked="" type="checkbox"/>
Magnetic Permeability ASTM A342 less than 2.0	<input type="checkbox"/>

WE CERTIFY THAT THE PART NUMBER, LOT NUMBER, AND SAMPLES REFERENCED ABOVE HAVE BEEN TESTED IN ACCORDANCE WITH THE APPLICABLE SPECIFICATION FOR THE TESTS REPORTED HEREIN. THIS CERTIFICATION SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT THE APPROVAL OF MAC FASTENERS, INC.


Quality Assurance Representative

AS9100C REGISTERED
SAI GLOBAL - 0058029

DE TRAY

Plating Works

Specialized Electro-Plating and Polishing
Nickel
Copper
Decorative Chrome
Satin Chrome
Zinc
Cadmium
Passivate
Bright Dip
Strip Copper
Descale

10405 EAST ELEVENTH STREET • INDEPENDENCE, MISSOURI 64052
Phone (816) 252-8411 Fax (816) 252-8527 • E-mail : DeTrayPlating@Aol.com

August 16, 2013

Mac Fasteners
1110 East Enterprise Street
Ottawa, Kansas 66067

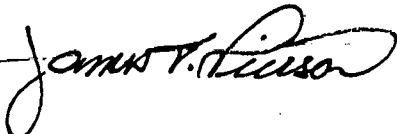
Subject: Certification

This is to certify that the following parts have been cadmium plate per QQ-P-416/AMS-QQ-P-416/NAS4160/AMS2400, Type II, Class 2. Please reference our Invoice#172207 dated 8/16/2013 for:

Lot#- 66173

P.N.- MS27039-1-08

James T. Pierson, Vice-President



DE TRAY PLATING WORKS

Please Visit our Web Site : DeTrayPlating.com



**Johnstown
Wire
Technologies**

124 Laurel Ave,
Johnstown, PA 15906

Phone: 814-532-5680
Fax: 814-532-5684

WORK ORDER
717080

TEST REPORT

LOT NUMBER
K-8172011

SALES ORDER / RLS
001387 / 1

SOLD TO

Mac Fasteners, Inc.
260 Airport Industrial Road
Paris, AR 72855
USA



CUSTOMER P.O. 50516	CUSTOMER PART	QUANTITY 10,066 LBS	COILS 5	LADING NO 00117560	SHIPMENT DATE 05/24/2013
SPECIFICATION MacFast-87186 AMS2301; AMS6322; AMS-S-6049A; MIL-S-6049A 8740 DFARS Defense Federal Acquisition Regulation Supplement Silicon Killed Fine Grain Aircraft Quality/Cold Heading Quality Drawn From Annealed Rod Spheroidize Annealed In Process Heavy Phos & Light Lube Ctd Size: .1865 +.001 -.000					
CERTIFICATION REQUIREMENTS					
Chemical					
C .42	Mn .88	P .007	S .013	Si .26	Al .031
Ni .42	Cr .48	Mo .21	Cu .08	V .002	
Co .000	Ti ???????	N .0062	Sn .005		
Physical					
AMS 2301 0000	J1 58	J10 44	J11 41	J12 39	J2 58
					J3 56
					J5 55
					J4 56
					J6 54
					J7 52
					J8 49
					J9 47
MacroClean E-381 111					
Mechanical					
TEST	UNITS	HIGH	LOW	AVERAGE	
Tensile Str	Lbs/SqIn	82000	81000	82000	
RA Per Cent	Percent	71.8	71.8	71.8	
Decarb FFD	Inches	.000	.000	.000	
Surface def. depth	Inches	.000	.000	.000	
Rod / Melt Source					
Rod Source Republic	Melt Source Republic	Country of Origin USA	Nafta Yes		
End of Certification					

I certify that the results are a true and correct copy of the records prepared and maintained by JOHNSTOWN WIRE TECHNOLOGIES in compliance with the requirements of the cited specification. Chemistry is as reported by the rod / bar supplier and is not in JWV A2LA accreditation. This test report cannot be reproduced or distributed except in full without the written permission of JOHNSTOWN WIRE TECHNOLOGIES. The test results certified herein relate only to the items tested.

Daniel J. Mallik
Daniel J. Mallik Director of Quality Assurance



CERTIFICATE OF TESTS

1807 HART 28TH ST.
SHOWS: 330-438-8580LOHANY, OH 44035
FAX: 330-438-5695

REPUBLIC STEEL

2/27/2013
6:32:00 AM
PAGE 1 OF 2PURCHASE ORD: 83626
PART NUMBER: FXT40AA-.375
ORDER NUMBER: 1539859 - 01
HEAT: 8172011PURCHASE ORDER DATE: 12/21/2012
ACCOUNT NUMBER: 5672-1920-01
SCHEDULE: 9690-92
REVISION: 1

===== CHARGE ADDRESS ===== SHIP TO =====

JOHNSTOWN WIRE TECHNOLOGIES
124 LAUREL AVE
JOHNSTOWN, PA 15906JOHNSTOWN WIRE TECHNOLOGIES
EDWARD ZAPOLA
124 LAUREL AVE
TRUCK STPO 9 ROD DOCK
JOHNSTOWN, PA 15904----- MATERIAL DESCRIPTION -----
HOT ROLLED STEEL COILS ALLOY AMS 2301K JOHNSTOWN WIRE SPEC RW-100 REVISION DTD 04/21/04 EXC PARA
10.3 AMS 6322N EXC HARD JOHNSTOWN WIRE SPEC RW-005 REVISION DTD 12/31/00 EXC SURFACE DEFECTS
JOHNSTOWN WIRE SPEC PART NO. FXT40AA REVISION DTD 12/31/00 MIL S 6049A & AMD 1 COND B-1 EXC MARK &
UT WAIVED EF-AISI-8740-H FINE GRAIN VACUUM DEGAISED AIRCRAFT QUALITY FIXED PRACTICE QUALITY
RESTRICTED CHEMISTRY RESTRICTED MAX INCIDENTAL ELEMENTS
SIZE: RDS .3750 DIAM X COIL
RDS 9.5250MM DIAM X COIL----- LADLE CHEMISTRY % -----

C	MN	P	S	SI	CU	NI	CR
0.42	0.88	0.007	0.013	0.26	0.08	0.42	0.48
V	MO	SN	AL	B	CB	N	
0.002	0.21	0.005	0.031	0.0000	0.000	0.0062	

----- CALCULATED TESTS -----

REDUCTION RATIO 1,177.6 TO 1

AUSTENITIC GRAIN SIZE 5 OR FINER BASED ON A TOTAL ALUMINUM CONTENT EQUAL TO OR GREATER THAN .020% PER ASTM A29.

----- SEMI - FINISHED RESULTS -----

JOMINY HARDNESS TEST SAK J405/ASTM A255
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 18 20 22 24 26 28 30 32
58 58 56 56 55 54 52 49 47 44 41 39 38 37 36 35 33 33 32 31 31 30 30 29MACRO ETCH TEST ASTM E381/MIL STD 430
ETCHANT: HCL TEMPERATURE: 170

	S	R	C
AVG	1	1	1

MAGNETIC PARTICLE TEST AMS 2301 AMS2304 AMS2300

	IND	AVG	IND	AVG
	FREQ	FREQ	SEV	SEV
PCE 03	0	0	0	0

----- FINISHED SIZE RESULTS -----

DECARBURIZATION TEST SAE J419/ASTM E1077/JIS G0558
ETCHANT = NITAL MAGNIFICATION = 100X

	SPIKE	COMPLETE	TOTAL
	INCHES	INCHES	DEPTH
			INCHES
PCE 2392	0.002	0	0.002

G. KRUTH
DIRECTOR QUALITY ASSURANCE

BY DEBORAH STOKES



CERTIFICATE OF TESTS

1807 EAST 28TH ST.
PHONE: 330-438-9380LORAIN, OH 44055
FAX: 330-438-8685

REPUBLIC STEEL

2/27/2013
6:32:00 AM
PAGE 2 OF 2PURCHASE ORD: 83626
PART NUMBER: FKT40AA-.375
ORDER NUMBER: 1539859 - 01
HEAT: 8172011PURCHASE ORDER DATE: 12/21/2012
ACCOUNT NUMBER: 5672-1920-01
SCHEDULE: 9690-92
REVISION: 1

CAPABLE OF SEAM DEPTH 1 1/2 MAX DIAMETER NOT LESS THAN .005 MAX

NOTES

CHEMICAL ANALYSIS CONFORMS TO APPLICABLE SPECS: ASTM E415, LBL10129, LBL10130, ASTM E1019, LBL10158, LBL10114, AND ASTM E1095, LBL10184, LBL10188.

REPUBLIC STEEL HEREBY CERTIFIES THAT THE MATERIAL LISTED HEREIN HAS BEEN INSPECTED AND TESTED IN

NOTES (CONTINUED)

ACCORDANCE WITH THE METHODS PRESCRIBED IN THE GOVERNING SPECIFICATIONS AND BASED UPON THE RESULTS OF SUCH INSPECTION AND TESTING HAS BEEN APPROVED FOR CONFORMANCE TO THE SPECIFICATIONS.

CERTIFICATE OF TESTS SHALL NOT BE REPRODUCED EXCEPT IN FULL.

ALL TESTING HAS BEEN PERFORMED USING THE CURRENT REVISION OF THE TESTING SPECIFICATIONS.

RECORDING OF FALSE, FICTITIOUS OR FRAUDULENT STATEMENTS OR ENTRIES ON THIS DOCUMENT MAY BE PUNISHED AS A FELONY UNDER FED STATUTES TITLE 18 CHAPTER 47.

THE MATERIAL WAS NOT EXPOSED TO MERCURY OR ANY METAL ALLOY THAT IS LIQUID AT AMBIENT TEMPERATURE DURING PROCESSING OR WHILE IN OUR POSSESSION.

NO WELD OR WELD REPAIR WAS PERFORMED ON THIS MATERIAL.

THE RESULTS REPORTED RELATE ONLY TO THE ITEMS TESTED.

SOURCE INFORMATION

MELT SOURCE: CANTON CAST ROLL MELT COUNTRY: U.S.A HOT ROLL SOURCE: LORAIN 9/10, U.S.A
MELT METHOD: EF BLOOM RED. RATIO: 1177.6

END OF DATA

CC

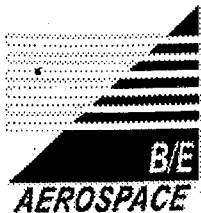
END OF DATA

WITH SHIPMENT 1 COPY PRINTED AT SHIPPING AREA
FAX SHIP TO 1 COPY ATTENTION EDWARD ZAPOLA
FILE 1 COPY

1-814-532-5684

G. KRUTH
DIRECTOR QUALITY ASSURANCE

BY DEBORAH STOKES



B/E Aerospace, Inc.

Page: 1 of 1

CONSUMABLES MANAGEMENT

P.O. Box 025263, Miami, FL 33102-5263 • Tel: 305.925.2600 • Fax: 305.507.7191
Plant Location: 10000 N.W. 15th Terrace, Miami, FL 33172 • SITA: MIAMMCR
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Shipped From: 10000 NW 15 TERRACE, MIAMI, FL 33172


Material Certification

The items set forth on the purchase order referred to below have been visually inspected and the dimensions thereof have been measured by us, and based on the aforesaid, as well as the representation made to us by the manufacturers of the items subject of such purchase order, we hereby certify that such items are in conformity with all current governmental and manufacturer's requirements, specifications, drawings, and conform to the purchase order requirements. Said items are in new condition and have not been obtained from any U.S. Government or Military source and are traceable to B/E Aerospace, Inc.

FIRM: DART AEROSPACE LTD

PURCHASE ORDER#: PO23495

LINE#	QUANTITY	U/M	PART-NUMBER	CUST REF#	LOT-NUMBER	MANUFACTURER	CCODE	MFR DATE	EXP DATE
3	100	EA	AN4-42A		323300	CALIFORNIA SCREW PRO	82507		


Jason Lewis
Vice President of Quality

03/25/14



CALIFORNIA SCREW PRODUCTS CORPORATION
14957 GWENCHRIS COURT
PARAMOUNT, CALIFORNIA 90723-3423
TEL (562) 633-6626
FAX (562) 633-2082

PACKING SLIP

Original : 28769

Sold To:
003635 B/E AEROSPACE CONSUMABLE MANAGEMENT P.O. BOX 025263 MIAMI, FLA 33102-5263

Ship To:
***** B/E AEROSPACE CONSUMABLE MANAGEMENT 9835 NW 14TH ST. MIAMI, FLA 33172

Customer P.O. No.		Sales Order	Date	Ship Via		Job No.
OYN947		46954	09-16-11	FED EX GROUND/WATKIN		323300
Pos	Item	Ordered	Delivered Qty	Unit	Weight	No. of Cartons

10	AN4-42A	5556	5556	ea	363	11
----	---------	------	------	----	-----	----

Honeywell Source Accepted:	
Stamp Impression _____	
Date _____	SEP 16 2011
RMRA # _____	

CALIFORNIA SCREW PRODUCTS CORP.

14957 GWENCHRIS COURT

PARAMOUNT, CALIF. 90723-3423

CAGE NUMBER : 82507

Airbus UK Approval No. AUK/SA/30144

Job Number

323300

BAE/AG/30235 / MAA

TEST REPORT

Part Number : AN4-42A
 Customer : B/E-AEROSPACE CONSUMABLE MANAGEMENT
 Procurement Spec. : NASM6812 REV. 2
 Surface Finish Spec : AMS-QQ-P-416 REV. C
 Heat Treat Spec : AMS2759/1 REV. E
 Mgmt Permeability : N/A

Part Standard : NASM3-20 REV. 2
 Cust. Purchase Order Number : 0YN947
 Thread Size & Form : .250-28 UNF-3A
 Thread Spec : MIL-S-7742 REV. D
 Sample Size Spec. : NASM6812 REV. 2

Shipped Quantity* : 5556
 Mfg Quantity : 6000
 Matl Spec : AMS 6322 REV. N
 Item Description : Bolt
 Heat Number : 10073780

* Actual piece count is within +/- 2% of the shown lot quantity.

* CONFORMS TO REQUIREMENTS OF AN3 THRU AN39 REV. 12
 NON-DESTRUCTIVE TESTS / SUBCONTRACTED (SEE CERTIFICATION)

Sample Size : 32 specimens Inspection Results : Accept : 32 Reject : 0 specimens
 Magnetic Particle : ASTM E1444-05 Fluorescent Penet. : N/A

METALLURGICAL EXAMINATION RESULTS

Sample Size : 5 specimens Accept : 5 Reject : 0 Lab Mount No. : 41324
 GRAIN SIZE : N/A HEAD STRUCTURE : Accept LAPS : Accept MICRO STRUCTURE : Accept
 FILLET COLD WORKED : Accept DECARB : Accept SEAMS : Accept CARBURIZED : Accept
 GRAIN FLOW HEAD : Accept GRAIN FLOW THREAD : Accept CRACKS : Accept THREAD RUN OUT : Accept

MECHANICAL TESTS RESULTS

ULTIMATE TENSILE STRENGTH (lbs.) - Loc. of Failure: Threads Minimum Req. : 4080
 Sample Size : 5 specimens Accept : 5 Reject : 0 Maximum Req. : 0

1. 5516	2. 5699	3. 5494	4. 5614	5. 5495	6. N/A	7. N/A	8. N/A
9. N/A	10. N/A	11. N/A	12. N/A	13. N/A	14. N/A	15. N/A	16. N/A
17. N/A	18. N/A	19. N/A	20. N/A	21. N/A	22. N/A	23. N/A	24. N/A
25. N/A	26. N/A	27. N/A	28. N/A	29. N/A	30. N/A	31. N/A	32. N/A

SHEAR (lbs.) S/D : SINGLE Sample Size : 5 specimens Accept : 5 Reject : 0 Minimum Req. : 3680

1. 4606	2. 4316	3. 4403	4. 4376	5. 4419	6. N/A	7. N/A	8. N/A
9. N/A	10. N/A	11. N/A	12. N/A	13. N/A	14. N/A	15. N/A	16. N/A
17. N/A	18. N/A	19. N/A	20. N/A	21. N/A	22. N/A	23. N/A	24. N/A
25. N/A	26. N/A	27. N/A	28. N/A	29. N/A	30. N/A	31. N/A	32. N/A

HARDNESS TEST Sample Size : 8 Hardness Req. RC : 25-32 Hardness Results : 28-30

STRESS RUPTURE TEST - N/A Load (Lbs.) : 0 Temperature (F) : 0 Periodic test, REF Job No.
 Sample Size : 0 Hours : 0

FATIGUE TEST - N/A Cycles : 0 Min Req. : 0
 Sample Size : 0 Low Load (lbs.) : 0 High Load (lbs.) : 0

TORQUE TEST - N/A Sample Size : 0 Load (Lbs/in) : 0

DPARS 252.225-7014 ALT. 1
 COMPLIANCE

STRESS DURABILITY TEST - N/A Sample Size : 0 LOAD (Lbs.) : 0 Hours : 0

STATEMENT OF CONFORMANCE:

This report relates only to items inspected/tested. Deviations from standard test methods, if any, are noted, and results from subcontracted inspection or testing, if any, are identified. All items were manufactured in the USA under a quality management system, which complies with ISO 9001 and with AS 9100. CALIFORNIA SCREW PRODUCTS CORP, hereby states: That the above product is mercury free; that the above listed lot has been produced, sampled, tested, inspected and marked in accordance with all requirements and that the product complies with all specification and contract requirements; that evidence of which is in the files of our company subject to examination. This report shall not be reproduced except in full, unless authorized in writing by CALIFORNIA SCREW PRODUCTS CORPORATION.

MARIA ELENA
 TORRES

Honeywell Source Accepted:

Stamp Impression

Date

SEP 16 2011

RMRA. #

(Name, Signature, Stamp and Date)

FINAL INSPECTOR SEP 16 2011



WireTech, Inc.

6440 E. Canning Street
Los Angeles, CA 90040
Phone (323) 722-4933
Fax (323) 721-2738

SOLD TO

Cal Screw Products
14957 Gwenchris Ct.
Paramount, CA 90723
USA

WORK ORDER/
083494

CERTIFICATION

HEAT NO.
10073780

SALES ORDER / RLS

839640 / 1

ISO 9001-2000 REGISTERED



MECHANICAL TESTING
CERT # 911.01

CERT# 911.01

J/N 323300

CUSTOMER P.O. 111282	CUSTOMER PART H1196	QUANTITY 2,583 Lbs	CARRIERS 2	LADING NO 00090289	SHIPMENT DATE 06/02/2011			
SPECIFICATION: C048740-102455A A-8740, AQ, SKFG, CHQ WIRE, SAIP Zinc Phosphate, Lime & Stearate Coating, Size:0.245/0.246 Specifications: AMS2301H, AMS6322N, MIL-S-6049A, AMEND. 1, H1196, AMS-S-6049-A								
CERTIFICATION REQUIREMENTS								
Chemical Properties								
C .41	Si .24	Mn .95	P .014	S .013	Cu .14	Ni .43	Cr .41	Mo .21
Physical Properties								
Grain Size Jominy 1	Jominy 2	Jominy 3	Inclusions Macro	Cleanliness	Mill Source			
6 5=52	8=44	10=37	S2-R1-C2	GOOD	F&S=0	Charter		
Country of Origin								
USA - DFAR Compliant								
Mechanical Properties								
TEST	UNITS					Results		
Tensile Strength	KSI					83.3		
Yield Strength	KSI					70.8		
% Elongation	%					29		
% Reduction of Area	%					71.6		
Rockwell Hardness B Scale	HRB (s)					86		

JOSE ERVANTES
6.3.2011
KMIK 8573
32 CSP
DFARS 252.225-7014 ALT. 1 COMPLIANCE

Merchandise covered by this invoice is warranted to be free from defects in workmanship or material but not for any specific length of time, type or measure of service. No claim for allowance will be recognized unless presented in writing within 10 days time after receipt of material. Our maximum liability for any claim predicated upon defective merchandise is limited to replacement of it, or to repayment of it, or to repayment of the purchase price thereof, as we elect. Material cut to specific length or size cannot be returned for credit and request for cancellation of such orders will not be considered if manufacture has been commenced. Buyer, by acceptance of the merchandise covered by this invoice, agrees to the foregoing terms and conditions and those set forth on the reverse hereof. "The recording of false, fictitious or fraudulent statements or entries on this document may be punished as a felony under Federal statutes including Federal law, Title 18, Chapter 47."

REPRODUCTION OF THIS CERTIFICATION IS NOT ALLOWED UNLESS IN FULL

Wire Tech, Inc. metallurgical laboratory is accredited in the following test: chemical analysis per ASTM E 415, mechanical testing per ASTM A 370, Rockwell hardness per ASTM E 18, metallographic mount preparation per ASTM E 3, decarburization depth per ASTM E 1077, IFI 140, inclusion rating per ASTM E 45, decarburization performed as per IFI 140.

The reported Chemical and Physical Properties are Melt Source results. Transcribed from mill certificates. HRB(W) are hardness results performed with a 1/16" carbide ball. Unless otherwise specified, HRB and HRC results are conversions from ASTM A370 tables 1 and 2. *Test result not covered by our current A2LA accreditation. Tests which have been undertaken by a subcontractor laboratory that is not accredited are not endorsed by A2LA or covered by Wire Tech, Inc. A2LA accreditation.

TEST RESULTS RELATE ONLY TO THE ITEMS TESTED.

"LATEST REVISIONS OF ASTM"

DFAR Material per Clauses 252.225-7014 ALT. 1, 252.225-7009, & 225.003(9)

Material is free of mercury, radium, or alpha contamination.



CHARTER STEEL

A Division of
Charter Manufacturing Company, Inc.

EMAIL

1658 Cold Springs Road
Saukville, Wisconsin 53080
(262) 268-2400
1-800-437-8789
FAX (262) 268-2570

CHARTER STEEL TEST REPORT

Reverse Has Text And Codes

Wiretech Incorporated
6440 East Canning Street
Los Angeles, CA-90040
Kind Attn : Cert To Contact

J/N 323300

Cust P.O.	6513-3
Customer Part #	8740C1A080-C-R
Charter Sales Order	70011147
Heat #	10073780
Ship Lot #	4026728
Grade	8740 R SK FG AQ 21/64
Process	HRSA
Finish Size	21/64

I hereby certify that the material described herein has been manufactured in accordance with the specifications and standards listed below and on the reverse side, and that it satisfies these requirements.

Test Results of Heat Lot# 10073780												
Lab Code: 7388	C	MN	P	S	SI	NI	CR	MO	CU	SN	V	
CHEM	.41	.95	.014	.013	.24	.43	.41	.21	.14	.008	.001	
%Wt												
	AL	N	B	TI	NB							
	.027	.0070	.0001	.002	.002							
JOMINY(HRC)	JOM01	JOM02	JOM03	JOM04	JOM05	JOM06	JOM07	JOM08	JOM09	JOM10	JOM11	JOM12
	57	57	56	55	52	51	47	44	39	37	37	35
	JOM13	JOM14	JOM15	JOM16	JOM18	JOM20	JOM22	JOM24	JOM26	JOM28	JOM30	JOM32
	35	34	33	32	31	31	30	29	29	29	29	28

JOMINY SAMPLE TYPE ENGLISH = B JOMINY LAB = 0358-01
MACRO ETCH SURFACE = 1 MACRO ETCH RANDOM = 1 MACRO ETCH CENTER = 1
AMS 2301 FREQUENCY AVERAGE = .03 AMS 2301 FREQUENCY INDIVIDUAL = .06
AMS 2301 SEVERITY AVERAGE = .02 AMS 2301 SEVERITY INDIVIDUAL = .03
CHEM. DEVIATION EXT. - GREEN =

Test Results of Rolling Lot# 1013507							
REDUCTION RATIO = 358:1							
Test Results of Processing Lot# 4026661, 4026728							
	# of Tests	Min Value	Max Value	Mean Value			
TENSILE	2.0	83.9	83.9	83.9	TENSILE LAB = 0358-02		
REDUCTION OF AREA	2	63	66	65	RA LAB = 0358-02		
ROCKWELL B	2	80	81	81	RB LAB = 0358-02		

NUM DECARB = 3 FREE FERRITE DECARB = .000 FREE FERR & PARTIAL DECARB = .001
CP SPHERO % LAB = 0358-02 NUM SPHERO = 3 SPHERODIZATION = 83.3

Specifications: Manufactured per Charter Steel Quality Manual Rev 9.08-01-09
Meets customer specifications with any applicable Charter Steel exceptions for the following customer documents:
Customer Document = COP 3010 Revision = M Dated = 12-MAR-03

Additional Comments: MEETS REQUIREMENTS OF SPECIFICATIONS AMS6322N/AMS2301J/MIL-S-6048A

Handwritten: 8573
Signature: Jose ERVANTE
Date: 6.3.2011
Stamp: DWABE 252.225-7014 ALT. 1 COMPLIANCE

Charter Steel
Saukville, WI, USA



Signature: Janice Barnard

Janice Barnard
Manager of Quality Assurance
07/15/2010

Rem: Load1,Fax0,Mail0

J/N 323300

The following statements are applicable to the material described on the front of this Test Report:

1. Except as noted, the steel supplied for this order was melted, rolled, and processed in the United States.
2. Mercury was not used during the manufacture of this product, nor was the steel contaminated with mercury during processing.
3. Unless directed by the customer, there are no welds in any of the coils produced for this order.
4. The laboratory that generated the analytical or test results can be identified by the following key:

Certificate Number	Lab Code	Laboratory		Address
0358-01	7388	CSSM	Charter Steel Melting Division	1653 Cold Springs Road, Saukville, WI 53080
0358-02	8171	CSSR/CSSP	Charter Steel Rolling/Processing Division	1658 Cold Springs Road, Saukville, WI 53080
0358-03	123633	CSFP	Charter Steel Ohio Processing Division	6255 US Highway 23, Risingsun, OH 43457
0358-04	125544	CSCM/CSCR	Charter Steel Cleveland	4300 E. 49th St., Cuyahoga Heights, OH 44125-1004
.	.	--	Subcontracted test performed by laboratory not in Charter Steel system	

5. When run by a Charter Steel laboratory, the following tests were performed according to the latest revisions of the specifications listed below, as noted in the Charter Steel Laboratory Quality Manual:

Test	Possible Laboratory	Specification
Chemistry Analysis	CSSM, CSCM/CSCR	ASTM E415; ASTM E1019
X-ray Fluorescence Stainless and Alloy Steel	CSCM/CSCR	ASTM E572
Macroetch	CSSM, CSCM/CSCR	ASTM E381
Hardenability (Jominy)	CSSM, CSCM/CSCR	ASTM A255; SAE J406; JIS G0561
Grain Size	CSSM	ASTM E112
Tensile Test	CSSR/CSSP, CSFP, CSCM/CSCR	ASTM E8; ASTM A370
Rockwell Hardness	All labs	ASTM E18; ASTM A370
Microstructure (spheroidization)	CSSR/CSSP, CSFP	ASTM A892
Inclusion Content (Methods A, E)	CSSR/CSSP, CSCM/CSCR	ASTM E45

Charter Steel has been accredited to perform all of the above tests by the American Association for Laboratory Accreditation (A2LA). These accreditations expire 01/31/11.

All other test results associated with a Charter Steel laboratory that appear on the front of this report, if any, were performed according to documented procedures developed by Charter Steel and are not accredited by A2LA.

6. The test results on the front of this report are the true values measured on the samples taken from the production lot. They do not apply to any other sample.
7. This test report cannot be reproduced or distributed except in full without the written permission of Charter Steel. The primary customer whose name and address appear on the front of this form may reproduce this test report subject to the following restrictions:
 - It may be distributed only to their customers
 - Both sides of all pages must be reproduced in full
8. This certification is given subject to the terms and conditions of sale provided in Charter Steel's acknowledgement (designated by our Sales Order number) to the customer's purchase order. Both order numbers appear on the front page of this Report.
9. Where the customer has provided a specification, the results on the front of this test report conform to that specification unless otherwise noted on this test report.



Handwritten signature: Jose ERVANTES
Handwritten number: 8573
Handwritten date: 6.3.2011



DFARS 252.225-7014 ALT. 1 COMPLIANCE

Certification

Tri-J Heat Treating
327 E Commercial St,
Pomona CA 91767
Phone: 909-622-9999 Fax: 909-622-1790

Order No.: 22351
Date: 08/12/2011
Entry Date: 08/10/2011
Page: 1

To: CALIFORNIA SCREW PRODUCTS COR
P.O.Box 228

PARAMOUNT CA 90723

Phone: 562-633-6626

Purchase Order No.: 114041

Job#: 323300

Material: 8740

We are pleased to provide you with the following Certification

Quantity	Part Number / Part Name / Part Description	Pounds
6,000	AN4-42A REV NA , NASM3-20 REV 2	400

Heat Treat AMS 2759 / 1 REV E
Harden to specific hardness

Insp. Type	Scale	Minimum	Maximum	Scale	Minimum	Maximum	Value
Customer Requirements:				Results:			
Hardness	HRC	27.0	32.0	Hardness	HRC	28.0	30.0

Process Steps

Step: 1 Process: Heat Treat

Treat at 1575 F, Dew point 50, Oil Quench at 130 F.(1 Hr Min)

Step: 2 Process: Temper

Temper at 1100 F, 1 Hr for each 400 Lbs. MIN 2 HRS

ISO 9001:2008 REGISTERED


Gary Madrigal
QC Manager
Tri-J Heat Treating

Southwest Plating Company, LLC

1344 W. Slauson Ave.
Los Angeles, CA 90044-2824
Telephone (323) 753 - 3781
Fax (323) 753 - 9472

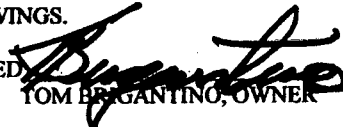
CERTIFICATION

DATE	INVOICE #
9/14/2011	127598

BILL TO
CA Screw Products Corp P.O. Box 228 Parmount, Ca. 90723

SHIP TO
CA Screw Products Corp 14957 Gwen Chris Ave. Parmount, Ca. 90723

P.O. NUMBER	TERMS	REP	SHIP	VIA	F.O.B.	PROJECT
114807	Net 30		9/14/2011			

QUANTITY	ITEM CODE	DESCRIPTION	PRICE EACH	AMOUNT
	# OF PIECES	6000	0.00	0.00
	PART NUMBER	AN4-42A REV.N/A NASM3-20 REV.2	0.00	0.00
	PANS	6	0.00	0.00
	JOB NUMBER	323300	0.00	0.00
	POUNDS	400	0.00	0.00
	MATERIAL	8740	0.00	0.00
	THICKNESS	.00035-.00045	0.00	0.00
	41	CAD PLATE TYPE 11 CL 2 PER AMS-QQ-P-416C	0.00	0.00
		.250-28 UNF-3A R/C 27-32 A/P .249-.246		
	CERT	WE HEREBY CERTIFY THAT THE PROCESSING AND INSPECTION PERFORMED ON PARTS BY THIS PURCHASE ORDER ARE IN ACCORDANCE WITH APPLICABLE SPECIFICATIONS AND CUSTOMER DRAWINGS.	0.00	0.00
	SIGN 1	SIGNED  TOM BRAGANTINO, OWNER	0.00	0.00
		DATE 09/14/2011		

Claims must be made within 5 days of receipt of goods. No returns accepted without our approval.

Total \$0.00

Hadd-Co. Inspection Lab.

Toll Free: (888) 339-8472
Phone: (310) 325-7620
Fax: (310) 325-9655

2420 Amsler Street, Torrance, California 90505
www.Hadd-Co.net E-Mail: haddco@earthlink.net

No. 4913



9/16/2011

TO:

CALIFORNIA SCREW PRODUCTS, INC.
14957 GWENCHRIS CT
PARAMOUNT, CA 90723

DATE :

P.O. NO.:

JOB / LOT NO.:

114917

323300

QUANTITY	PART NUMBER	DESCRIPTION
32	AN4-42A REV. N/A NASM3-20 REV. 2	BOLT MPI PER ASTM E1444-05 NASM6812-2 MAT: 8740 PLATED 32 PC SAMPLE OF 6000 PC LOT

100% INSPECTION

Magnetic _____ Penetrant _____

NO REJECTS

Qty Rejects _____

This is to certify that parts under subject purchase order
have been ☐ Fluorescent Penetrant / ☒ Magnetically inspected
in accordance with applicable and / or purchase order
requirements.



STEPHANIE GARFIELD LEVEL II

INSPECTOR

Note: Altering of this certification renders it void.